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Cultural Moderation of the Relationship Between Anticipated Life Role Salience and Career Decision-Making Difficulties

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CULTURAL MODERATION OF THE RELATIONSHIP BETWEEN
ANTICIPATED LIFE ROLE SALIENCE AND CAREER
DECISION-MAKING DIFFICULTIES

by

Emily Anne Schmidtman

A Dissertation
Submitted to the Graduate School
and the Department of Psychology
at The University of Southern Mississippi
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for the Degree of Doctor of Philosophy

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ABSTRACT

CULTURAL MODERATION OF THE RELATIONSHIP BETWEEN
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The perceived importance of, and commitment to, work and family roles has significant implications for the career decision-making difficulty (CDMD) of undergraduate college students. Additionally, cultural variables have been shown to influence undergraduate students' anticipated life role salience (LRS) as well as the amount of difficulty experienced in making a career decision. Given this information, the current study assessed the relationship between LRS and CDMD specifically in terms of differences that may occur within this relationship for different cultural groups. Using a sample of college students (total N = 246), an online survey was used to gather information about their LRS and current CDMD. Race, sex, collectivism/individualism, and religiousness/spirituality were also assessed in efforts to determine whether or not these specific multicultural variables moderate or buffer the effects of LRS on CDMD using Structural Equation Modeling (SEM). Results of this study indicate that Daily Spiritual Experience, a specific sub-construct of religiousness/spirituality, was the only significant multicultural moderator in the relationship between LRS and CDMD. Specifics of this moderation for each of the four life roles, as well as clinical implications, are discussed.

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LIST OF ABBREVIATIONS

<i>CDMD</i>	Career Decision-Making Difficulty
<i>LRS</i>	Life Role Salience
<i>TPE</i>	Transcendental Positive Emotions

CHAPTER I - INTRODUCTION

Undergraduate college students are being faced with the challenge of making career decisions that are congruent with their future work and family goals. Research has shown that college students tend to adjust both work and family plans according to their hypotheses about which choices are likely to cause the least amount of future role conflict (Barnett, Gareis, James, & Steele, 2003; Cinamon & Rich, 2005; Weer, Greenhaus, Colakoglu, & Foley, 2006). Given the many ways in which life roles may impact each other, it is not surprising to find that the salience of certain life roles can exacerbate or lessen the degree of difficulty a college student experiences in making a career decision. As career decision-making difficulty (CDMD) is the most prevalent reason people tend to seek vocational counseling services (Amir & Gati, 2006), the field of vocational psychology has produced increasing amounts of research regarding the etiology of CDMD. However, the relationship between anticipated life role salience (LRS) and CDMD has not received explicit exploration in the current literature. Additionally, multicultural considerations regarding the etiology and treatment of CDMD are needed.

Career Decision-Making Difficulty

The average number of work or career transitions one experiences in a lifetime has increased due to contemporary changes in the “world of work” (Gati, Krausz, & Opisow, 1996). Consequently, people are faced with the challenge of making career decisions more frequently. The challenge is that the process of making a career decision (particularly, an optimal career decision) is complex, which can be especially daunting for the traditional-aged college student population of young adults who are less likely to have had many prior decision-making experiences (Amir & Gati, 2006). Many factors

can influence or interrupt the career decision-making process, often causing college students to experience career decision-making difficulty (CDMD) at one point or another (Amir & Gati, 2006; Gati & Amir, 2010; Gati et al., 1996; Opisow, 1999).

One of the most common reasons that students (or people, in general) seek career counseling services is because they are experiencing some level of difficulty in their career decision-making process (Amir & Gati, 2006; Gati & Amir, 2010; Gati et al., 1996; Opisow, 1999). Therefore, a clinician's ability to identify the etiology of, and contributing factors to, clients' CDMD is crucial (Amir & Gati, 2006; Gati & Amir, 2010; Gati et al., 1996; Opisow, 1999). Unfortunately, common reactions to experiencing CDMD include avoidance of the career decision-making process, stopping the process all-together (often resulting in unemployment), or making a poor career decision (Gati et al., 1996). The long-term consequences of these potential pitfalls can be severe. Current literature demonstrates that making an uninformed or careless career decision often results in both financial and psychological stress (Gati & Amir, 2010). For college students, this may mean spending a longer time in school or a decrease in academic motivation and performance (Gati et al., 1996). Issues that may result post-college include low job satisfaction, low job retention, and subsequently, unemployment (Dooley, 2003). Even more concerning are the serious mental health consequences of job loss or unemployment such as clinical depression, substance use, and suicidality (Dooley, 2003; Paul, Geithner, & Moser, 2009). Given the seriousness of these implications, the field of vocational psychology has accumulated a significant foundation of literature regarding the etiology of CDMD.

Concepts such as career indecision and career indecisiveness have been explored in the field of vocational psychology since the 1960s (Osipow, 1999); however, the theoretical construct of CDMD is relatively new to career decision-making literature. In 1996, Gati and colleagues proposed the taxonomy of CDMD which they derived from decision theory and utility theory. Decision theory can be described as, “the best decision is the one that best helps to achieve the decision maker’s goals” (p. 511) and utility theory can be described as, “a prescription for the best method of making a decision” (Gati et al., 1996, p. 511). Gati and colleagues CDMD model relies on a theoretical concept of “the ideal career decision-maker” who is able to recognize that a career decision must be made, has the motivation to make a career decision, and has the ability to make the “right” career decision. In order to support this taxonomy empirically, Gati and colleagues (1996) gathered testimonies from 200 career counseling clients and 10 professional career psychologists regarding their description of career decision-making difficulties. These testimonial descriptions were combined with the theory-based taxonomy of CDMD to develop a questionnaire measuring three main categories and 10 sub-categories of CDMD that often occur before and during the Career Decision-Making (CDM) process. This questionnaire was named the Career Decision Difficulties Questionnaire (CDDQ; Gati et al., 1996). After revision of the initial instrument, adjusted according to the initial test-retest results and four subsequent revised tests, cluster analysis of the revised questionnaire was done. Data were collected from 158 Israeli adults who were at the beginning of their career decision-making process and 304 American undergraduate students (ages 19-23). Results suggested that there is evidence to support the validity and reliability of the CDDQ. This measure was determined to be

appropriate for the initial screening of career clients, assessment of career clients' specific treatment needs, and measurement of different vocational interventions' effectiveness (Gati et al., 1996). For more details regarding the scales, subscales, and development of the CDDQ, please refer to the method section of this document.

After CDMD was empirically established as a vocational construct (Gati et al., 1996), researchers began to find that the dysfunctional beliefs and indecisiveness (i.e., two aspects of CDMD) were causing the greatest amount of difficulty across a variety of populations (Amir & Gati, 2006; Gati & Amir, 2010). For example, Amir and Gati (2006) assessed the CDDQ results of 299 Israeli participants between the ages of 17 and 30 years who had recently completed their obligatory military service (2-4 years between high school and higher education) and were currently engaged in a pre-academic year that prepares potential college students for their major of choice. Of all 10 theoretical areas of CDMD that were assessed (i.e., lack of motivation, indecisiveness, dysfunctional myths, lack of knowledge about process, self, occupations, ways of obtaining information, internal conflicts, and external conflicts), participants indicated the highest levels of difficulty in areas of indecisiveness and dysfunctional beliefs, based on their CDDQ scores. This finding was replicated a few years later in a sample of 626 college students (mostly White females) in the Midwest of the United States (Gati & Amir, 2010). Interestingly, the study with the Israeli sample (Amir & Gati, 2006) assessed for congruence between objective, self-reported CDMD on the CDDQ and participants' subjective report of CDMD on the Expressed Difficulties Questionnaire. Results of this CDDQ score comparison indicated that participants not only experienced more difficulty

in areas of indecisiveness and dysfunctional beliefs but were also significantly less aware of their experienced difficulty in these areas.

From here, the field began to initiate important developments in the conceptualization of CDMD as an increasingly multifaceted construct. New instruments were introduced and existing instruments were revisited to allow for the assessment of cognitive and emotional facets separately. As more attention was drawn to the dysfunctional beliefs and indecisive aspects of CDMD, due to the findings of Amir and Gati (2006) and the growing literature on the distinction between career indecision and indecisiveness (Opisow, 1999), vocational psychologists re-visited some suggestions for future research that were presented in the initial CDDQ development literature (Gati et al., 1996). The authors specifically point out the low scale reliability of the dysfunctional beliefs sub-scale, and, though they chose not to omit this scale from the CDDQ due to “its prevalence and potential impact on the process of career decision making,” (p. 521), they strongly suggested that this construct be investigated further (Gati et al., 1996).

In 2007, Saka and Gati proposed a distinction between the information-related, cognitive difficulties represented in the CDDQ and the more chronic, pervasive difficulties that result from emotional and personality-related factors. In other words, the difficulty of making a career decision can be considered in light of both external (cognitive) and internal (emotion/personality) factors. By utilizing a new CDMD measure (in press at the time) to measure difficulties arising from emotional and/or personality-related factors, entitled the Emotional and Personality Career Difficulties Scale (EPCD; Saka, Gati, & Kelly, 2008), Saka and Gati (2008) collected self-report data from a sample of 395 Israeli students enrolled in two of the largest universities in Israel

(average age of participants was 22.4). Using longitudinal data from this sample after a one-year time delay (before and after completing a pre-academic training year), the completion of two planned contrasts demonstrated that the emotional and personality aspects of CDMD assessed by the EPCD were, in fact, persistent across time.

Specifically, the first planned contrast demonstrated that participants who indicated high emotional and personality-related CDMD continued to indicate high CDMD in the same areas even after having completed their pre-academic training year designed to solidify future career interest areas. This outcome was also true for the second planned contrast that assessed persons with medium levels of emotional and personality CDMD.

Additional support for the importance of distinguishing between external and internal CDMD factors was provided by the professional consensus of 28 vocational psychologists in a study by Gati, Amir, and Landman (2010). Results of this study showed that internal CDMD factors (i.e., personality and emotionality) are more severe than external CDMD factors (i.e., cognitive analysis of occupational information) in terms of vocational counseling treatment needs and prognosis. Specifically, the length of treatment for clients struggling with internal CDMD tends to be significantly longer and often beyond the scope of career counseling as opposed to clients struggling with external CDMD (Gati et al., 2010; Saka & Gati, 2007).

Along this line of thinking, there appear to be other internal factors not accounted for by the EPCD that may affect CDMD. Specific to the college student population, one's internal valuing of anticipated future life roles can cause difficulty in the career decision-making process (Barnett et al., 2003; Cinamon, 2010; Cinamon & Rich, 2005; Schedin, Bullock-Yowell, Mohn, & Leuty, Unpublished manuscript; Weer, et al., 2006).

By using a structural equation model to analyze the self-report of 300 undergraduate students' CDMD (as measured by CDDQ and EPCD scores), Schedin and colleagues (Unpublished manuscript) found that participants who anticipated engaging in a parental role in the future and attributed high importance and commitment to this role (i.e., participants that have high parental role salience) tend to have fewer CDMD (both external and internal) than those with low parental role salience. Additionally, participants who anticipated engaging in a marital role in the future and attributed high importance and commitment to this role (i.e., participants that have high marital role salience) tend to have more CDMD (both external and internal) than those with low marital role salience. These results are in line with previous research that demonstrates the intentionality in college students' career decisions based on which future family roles are most important to them and what career and family role choices will likely cause the least amount of work-family conflict (Barnett et al., 2003; Cinamon & Rich, 2005; Weer, et al., 2006). Given the novelty of empirical evidence supporting a specific relationship between CDMD and life role salience (LRS), in addition to the importance of vocational psychologists' ability to help college students make an informed career choice that will best accommodate their future family and career goals, the current study aims to investigate this relationship more thoroughly.

Life Role Salience

A role is a combination of expectations (created by self and others) and performance (rated by self and others) regarding what it means to occupy a certain position (Super, 1980). People engage in many roles throughout the course of their lifetime (or life span) such as the role of a child, student, parent, spouse, employee,

homemaker, and so on (Super, 1980). The construct of Life Role Salience (LRS) was presented by Super in 1980 and described as the importance and commitment one attributes to the different roles one occupies throughout a lifetime. Unlike constructs such as role importance, role centrality, and role involvement, LRS is unique in that it assesses the importance of, and commitment to, a role in relation to other roles. In Super's (1980) words, LRS is defined as, "the degree to which a given role stands out from others played" (p. 97). Based on Super's Life Space theory (1980), it is assumed that a person only has so much "space" in his or her life at any given time to accommodate participation in multiple roles. Because of this, the requirements of one role may compete with the requirements of another role and create "role conflict" (Super, 1980). For example, a mother may have to leave work early to take care of her sick child, which demonstrates a conflict between her work role and her parental role.

Research has shown that when two roles conflict, a person tends to engage in whichever role is more important to them or whichever they are most committed to, in other words, whichever role is more salient to them, at the cost of the other role (Greenhaus & Powell, 2006). Given the amount of importance and commitment people tend to place on both work and family roles, it is not surprising that conflict between work and family roles is quite common. Research has demonstrated that the experience of work-family conflict has a significantly negative effect on psychological well-being (Barnett et al., 2003; Mathews, Wayne, & Ford, 2014; Super, 1980). Current literature supports that work and family LRS can have a direct effect on well-being (Barnett et al., 2003). Work role salience, but not family role salience, has been found to moderate the relationship between role conflict and well-being. Specifically, it appears that when role

conflict and work role salience are both high, well-being decreases (Barnett et al., 2003). Given the likelihood that individuals will experience role conflict at some point in their life, the literature implies that persons with high work role salience have increased risk for psychological distress compared to those with high family role salience.

LRS research is predominantly present in the field of psychology and most often studied in terms of career development. Based on the current body of LRS literature, it appears that researchers are most interested in work role salience. The most recent, formal review of LRS literature was completed by Greer and Egan in 2012; this qualitative review included 80 peer-reviewed journal articles on quantitative studies. Based on the empirical data in this review, it is apparent that a link exists between LRS and the career development process (Greer & Egan, 2012). For example, LRS has been shown to predict career exploration behavior (Greenhaus & Connolly, 1982; Greenhaus & Sklarew, 1981; Sugalski & Greenhaus, 1986), job stress (Lang & Lee, 2005), work values (Holloway, Suziki, Yamamoto, & Mindnich, 2006; Richmond, 1985), career commitment (Aryee & Tan, 1992; Hornowska & Paluchowski, 1994), anticipated future role conflict (Cinamon, Most, & Michael, 2008), willingness to re-locate for work (Bird & Bird, 1985; van der Velde, Bossink, & Jansen, 2005), and mediate the relationship between family stress and well-being (Luchetta, 1995).

Researchers developed many instruments measuring the construct of LRS following Super's introduction of the concept, such as the Measure of Career-Role Salience (Greenhaus, 1973), the Role Salience Inventory (Super & Nevill, 1984), the Values Scale (Super & Nevill, 1986a), and the Salience Inventory (Super & Nevill, 1986b). However, the increase in the dual-earner population over the past several

decades has rendered the structure of these assessments outdated in many ways (Marks, 2006, U.S. Department of Labor, Bureau of Labor Statistics, 2009). Thus it became necessary for vocational research to address the limitations of these existing measures. There was a need for an instrument that would assess both men *and* women's LRS and would measure work and family roles separately instead of on a continuum where family roles and work roles were on opposite sides of the spectrum (Amatea, Cross, Clark, & Bobby, 1986). Additionally, it became apparent that assessing one's "family role" as a single construct was too broad and could not account for the variations in specific family roles, such as a homemaker or spouse. In 1986, Amatea and colleagues piloted an instrument that would meet these contemporary demands. The Life Role Salience Scales (LRSS; Amatea et al., 1986) assesses the salience of four different life roles; Occupational, Parental, Marital, and Homecare. Given that many college students have not yet had experience in all four of these roles, the development of this measure is particularly important because it accounts for one's *anticipated* LRS in roles they may not have entered yet.

One of the most recent studies on college student LRS, which also provides implications for college students' career decision-making process, was conducted by Cinamon in 2010. Using a sample of 387 unmarried college students, Cinamon assessed the relationship between anticipated LRS, anticipated work-family conflict, and self-efficacy for managing work-family conflict. Students were given the LRSS (Amatea et al., 1986), Cinamon and Rich's (2005) Work Family Conflict questionnaire, and Cinamon's (2010) questionnaire for Self-efficacy for Work Family Conflict management. After assessing the participants' scores on the LRSS, students were categorized into four

different profiles via cluster analysis; “dual high” profiles represented participants who reported high salience for both work and family roles, “work profile” represented participants who reported high work role salience, “family profile” represented participants who reported high family role salience, and “dual low” profile represented participants who reported low salience for both work and family roles. The results of further multivariate analyses suggested that college students who had high work role salience (i.e., “work profile”) anticipated the highest level of work-family conflict in their future and report the least self-efficacy in their ability to remediate work-family conflict. The opposite pattern was found to be true of students with high family role salience who anticipated the least future work-family conflict and reported the highest self-efficacy in their ability to handle work-family conflict.

These findings are significant to the link between LRS and CDMD, given that previous research has shown that undergraduate and graduate college students tend to make career and family decisions based on their anticipated future work-family conflict (Barnett et al., 2003; Cinamon & Rich, 2005; Mason & Golden, 2002; Weer et al., 2006). Therefore, the current body of literature suggests that persons with higher family role salience will have less difficulty making a career decision and persons with higher work role salience will have more difficulty making a career decision. As previously mentioned, a study by Schedin and colleagues (Unpublished manuscript) offers an explicit relationship between anticipated LRS and current CDMD in the undergraduate college student population. Results of this study suggest that students with high marital role salience tend to have more CDMD than students with low marital role salience and students with high parental role salience tend to have less CDMD than students with low

parental role salience. Therefore, specific facets of family role salience appear to have drastically different relationships in terms of the difficulty they experience in making a career decision. Interestingly, there was no significant relationship between students' anticipated work role salience and CDMD until all other family roles were removed from the structural equation model.

Due to the novelty of the empirically supported relationship between LRS and CDMD in the vocational psychology literature, as well as the somewhat unexpected results of Schedin and colleagues (under review), it is clear that further research is warranted to better understand the implications of this relationship, as well as how multicultural differences may impact the relationship.

Multicultural Considerations

Based on the strong evidence for multicultural differences in both LRS and CDMD literature, the current study aims to clarify to what extent cultural factors, such as race, sex, collectivism and individualism, and religiousness and spirituality moderate the relationship between LRS and CDMD in the college student population.

Race

Schedin and colleagues (under review) measured the LRS of 300 White (56%) and Non-White (44%) undergraduate college students and, using a structural equation model, found that White participants endorsed significantly higher parental and marital role salience than Non-White participants. Given that 89% of the Non-White sample identified their race as Black, these results are in line with a recent study on the life role salience of Black South African populations (Bosch, de Bruin, Kgaladi, & de Bruin, 2012). Conclusions of this study suggest that Black men and women are becoming

increasingly more career-focused and less likely to assume domestic family roles.

Additionally, results of a qualitative study by Giele (2008) imply that Black American women are more driven by their occupational goals and are less likely to engage in family roles such as being a homemaker or spouse. Other studies show that engaging in a marital or spousal role is valued significantly less in Black American culture than it is in White or Mexican American culture and, therefore, Black Americans are less likely to marry or remain married (Raley & Sweeney, 2009).

Other factors that have contributed to racial differences in career decision-making include both actual and perceived occupational opportunity and barriers. Of the two, research has supported that perceived opportunity and barriers are more influential than actual opportunity and barriers when assessing differences in career decision-making behavior (Chung & Harman 1999; McWhirter, 1997). In general, racial minorities expect to face more barriers in their career development than do White populations (McWhirter, 1997). The unfortunate consequence of this pattern is that, throughout years of research, data show that racial minorities often do not believe that they have the ability or opportunity to attain their most desired occupation and thus settle for what they perceive as a realistic alternative rather than attempting to get their first choice in a career (Nauta, 2010; Saka et al., 2008; Germeijs & Verscheuren, 2006). This is demonstrated empirically by the repeated finding that, although career interests do not differ significantly across ethnicity or race, perceived barriers in the process of achieving those occupations are more prevalent in racial minority groups than in White populations (Gloria & Hird, 1999; McWhirter, 1997; Osborn, Howard, & Leierer, 2007).

Although not all perceived barriers are attributed to racial discrimination, racial salience can account for a significant portion. Gloria and Hird (1999) describe racial salience as, “the extent to which a person perceives race as a significant definer of one’s work options and experiences,” (p. 159). Results show that minority populations anticipate experiencing racial discrimination in the application process and throughout participation in a career field. This anticipation can hinder the career decision-making self-efficacy of ethnic minorities (Duffy & Dik, 2009; Gati et al., 1996; McWhirter, 1997; Mortimer, Zimmer-Gembeck, Holmes, & Shanahan, 2002). Additional support for racial influences on career decision-making difficulties is provided in a study by Lease (2004) whose results suggest that racial minorities may experience an external locus of career control and greater career decision-making concerns.

Collectivism/Individualism

Another multicultural construct that has been shown to influence both LRS and CDMD is collectivistic or individualistic identification. Ethnic and racial minorities in the United States (U.S.) most often identify as collectivistic, whereas the White, non-Hispanic population generally identifies with individualistic values (Chung & Harmon, 1999; Mau, 2004). The focus of collectivist communities is the good of the whole; in other words, what is best for the community and not what is best for one-self. This other-focused identity often cultivates strong family and community alliances and involves sharing resources, sensitivity to the effect one’s choices can have on others in the community, and disapproval of acts of selfishness.

In a study by Mau (2004), a sample of the U.S. high school students (N = 361) were assessed for their career decision-making abilities. This sample included 162 White

participants, 59 African participants, 45 Hispanic participants, 14 Asian American participants, 25 Native American participants, and 56 participants who identified as “other” or did not report race-ethnicity. Using results of an analysis of variance (ANOVA) test and a multiple analysis of variance (MANOVA) to assess the overall and comparative CDMD across racial-ethnic categories, Mau found that in this sample, Asian American students reported the highest CDMD scores when compared to all other racial-ethnic groups. This suggests that Asian American high school students experience the most difficulty when making a career decision as compared to other students. Mau hypothesized that the more collectivistic the racial-ethnic group, the more members of that group would have more CDMD, given the increased chances of high family role salience conflicting with individualistic career goals (i.e., work role salience). Given that Asian American culture was ranked highest in collectivistic values of all racial-ethnic groups in this study, Mau concluded that his hypothesis was supported.

Returning to the idea of strong family values in collectivistic cultures, current literature supports that family role salience is extremely influential in the decision-making of persons who identify with collectivistic cultural minorities (see Arbona, 1995; Bowman, 1995; Brown, 1995; Cheatham, 1990; Gottfredson, 1986; Johnson, Swartz, & Martin, 1995; Leong & Serafica, 1995; Martin, 1995). In terms of vocational decision-making, specifically, this family-focused trend was demonstrated by the results of a study that assessed the career development of 20 distinguished or “notable” Latinas (Gomez et al., 2001). Prior to this study, this sample of women had been recognized, along with 255 others, in a published biographical directory of Latinas in the U.S. The participants of this study were “leaders in their occupational fields and professional organizations; being

appointed to influential positions in government and private industry; being the recipients of prestigious awards, prizes, grants, and fellowships; frequently invited speakers at professional meetings; and members of important executive and professional boards” (Gomez et al., 2001, p. 288). Self-report from these participants was gathered via individual in-depth, semi-structured interviews (adapted from Richie et al., 1997) covering topics such as work, family, and cultural identity. The interviews were recorded and later transcribed, coded, and analyzed at four different levels. Based on this qualitative data, the authors determined that familism and family-related aspirations were significantly influential in the career decision-making of this Latina sample. Current literature supports similar themes of family involvement for other ethnic minorities, including African Americans and Native Americans (Brown, 2004).

Additionally, collectivistic values such as family relations appear to be influential to ethnic majority populations as well. Relevant to the college student population is a recent study by Slaten and Baskin (2014) which found that aspects of family belongingness were significantly related to the CDMD of young adults. Using a sample of 436 predominantly Caucasian (87%) undergraduate college students from a Midwestern university, a confirmatory factor analysis (CFA) was conducted to assess the relationship between belongingness (peer and family) and CDMD. Results of path analyses suggest that peer belongingness did not have a significant influence on CDMD but family belongingness did. Collectively, these studies provide a solid rationale for further investigation of how aspects of collectivism or individualism may mediate the relationship between LRS (of both work and family roles) and CDMD.

Religiousness and Spirituality

Current research suggests that one's self-reported level of religiousness or spirituality is likely to influence work and family LRS and can also affect the decisions that are made within these roles. Given that the constructs of religiousness and spirituality are characterized by deeply held personal beliefs and values (Lips-Wiersma, 2001; Neck & Milliman, 1994), it is not surprising that the salience of different life roles would be affected by one's level of religiousness or spirituality, considering that LRS shares similar characteristics (i.e., values, attitudes and commitment). This is demonstrated well in the literature on work LRS in the context of religion. Self-reports from 1,869 randomly selected members of 31 Christian congregations in the U.S. were used by Davidson and Caddell (1994) to assess the relationship between religion and the meaning of work. Discriminant analyses of this data suggest that levels of religious participation and identification are positively correlated with viewing work as a "calling" (rather than a job) and interest in social justice. In other words, the more religious someone is, the more likely he/she is to report that his/her work is personally meaningful, existentially satisfying, and serves a purpose to society. Contrary to the authors' hypotheses, denomination affiliation, pastoral influences, and sermon messages were not significant in predicting the way work is viewed. Although work role salience was not measured directly in this study, it appears that the internalized valuing of religion is likely to have the greatest impact on the importance of, and commitment to, work.

Similar results have been found in more diverse samples in terms of religion, spirituality, and ethnicity. In a longitudinal, qualitative study, Lips-Wiersma (2001) interviewed 16 participants, ages 40-50, between the years 1997 and 1999. Participants'

self-identified as Maori (2), Samoan (1), British (3), American (1), and New Zealand Caucasian (9) and indicated their religious or spiritual affiliations as Catholic (2), Anglican (2), Buddhist (1), Quaker (1), Baha'I (2), Jewish (1), Haahi Ringatu (1), Indian spiritual guide (1), and spiritual but non-affiliated (4). Data was collected during two meetings; the first of which involved eliciting a psycho-biographical narrative from participants regarding their career history and development in light of their religiousness and spirituality over time. The participants then were instructed to keep a diary regarding work and religious/ spiritual events and experiences and engaged in a second meeting to review their entries. Content analyses were completed to identify themes and characteristics of the participants' verbal narrative and written diary entries. Results of this study suggest that religiousness and spirituality have a direct influence on personal beliefs about worthwhile purposes in one's life. This sample of participants indicated four main worthwhile purposes; Developing and becoming self, unity with others, expressing self, and serving others. Results also suggest that when participants' work was not characterized by any of these four purposes, they felt that their spirituality and work were not aligned and were often faced with making a career choice to remedy this dissonance. Therefore, the conclusions of this study present implications for fluctuations in work role salience depending on how well the purpose of work aligns with their religious or spiritual beliefs. Additionally, these results imply a direct relationship between religiousness/ spirituality and career behavior with an emphasis on career decision-making.

Despite the compelling literature regarding work and spirituality, family roles in the religious context may be even more prominent. A few contemporary studies have

found that religious leaders across traditions and affiliations encourage their congregations to spend less time and energy on advancing their career and to focus on their family roles instead (Edgell, 2005). Additionally, American religious teachings emphasize the centrality of the family unit in upholding social order (Sherkat & Ellison, 1999; Wilcox, Chavez, & Franz, 2004). In line with these religious messages, the results of Schedin and colleagues (under review) suggest that as religiousness or spirituality increases, so does family role salience, specifically, parental and marital roles.

The importance of family roles is also supported by unorganized religion and spirituality. Gomez and colleagues (2001) assessed the relationship between family roles and spirituality among a sample of Latina family caregivers and found that the participants' spiritual beliefs and values were largely influential in their assumption of a caregiving role. Participants reported that engaging in spiritual practices, such as meditation and prayer, gave them a sense of balance, strength, and "calling" that allowed them to uphold responsibilities in their family roles. Similar results have been repeated in samples with more ethnic diversity (Koerner, Shirai, & Pedroza, 2013; Pierce, 2001; Theis, Biordi, Coeling, Nalepka, & Miller, 2003). It is clear that religiousness and spirituality have a direct effect on family role salience and CDMD, as evidenced by empirical support for the facilitation of healthy marital relationships, family functioning, and career decision-making points via religious or spiritual influence (Giblin, 1996; Tanyi, 2006).

Sex

Another prominent multicultural construct present in the LRS and CDMD literature is sex. In regards to life roles, current research has concluded that the female

population is facing increasing work-family role conflict as the dual-earner population is becoming the norm and the female population tends to have high salience for both work and family roles (Fogliasso, 2011; Humbert & Lewis, 2008; Marks, 2006; Noor, 2004, U.S. Department of Labor, Bureau of Labor Statistics, 2009). It is important to note that the majority of research in this area uses sex (i.e., male and female) and gender (i.e., men and women) terms interchangeably, though their identified variable was sex. This review will reflect the language used in these articles, keeping that caveat in mind.

A recent study by Boone and colleagues (2013) used the self-report of 54 male and 45 female global industry leaders to assess their work and family values as well as their specific perception of barriers to career advancement for the female population. Data from this sample demonstrate no significant sex differences in levels of career ambition or family investment, suggesting similar work and family role salience for both sex groups. It is notable that both male and female participants were in considerable agreement regarding barriers to female career advancement. Contrary to the commonly referenced “glass ceiling” theory that emphasizes the external career barriers faced by the female population, results of this study suggest that self-imposed barriers are viewed as the most prominent and problematic for female professionals. At the top of this list of self-imposed barriers was the tendency for females to make family and household responsibilities a higher priority than workplace advancement.

Based on these results, Boone and colleagues (2013) propose the presence of an “invisible obstacle course” rather than a “glass ceiling” to best symbolize the significant internal, as well as external, barriers to the career advancement of female professionals. Given that work and family LRS appears to be consistent across sex groups in this

sample, the authors propose that "...women have distinctly different personal circumstances than men. For instance, these women have a greater tendency for their spouses to work outside the home, which complicates the challenge of climbing the corporate ladder while managing family and household" (p. 234). Such a statement is congruent with prior literature which suggests that most aspects of contemporary employment do not allow for congruence between work and family responsibilities, which often leads women to engage in self-employment (Belle & La Valle, 2003; Greer & Green, 2003; Marlow, 1997; Orhan & Scott, 2001).

It is important to supplement Boone and colleague's study (2013) with the understanding that literature using professional or higher education samples supports equality in LRS across sex groups because they are less likely to endorse traditional gender roles (Powell, Butterfield, & Parent, 2002), whereas blue-collar populations tend to demonstrate an emphasis on more traditional gender roles, with women having higher family role salience than men and men having higher work role salience than women (Deutsch & Saxton, 1998). This is relevant to the college student population, given that Westring and Ryan (2011) found that medical graduate students reported high anticipated salience for both family and work roles across sex groups with no significant differences between the groups. Other research suggests that feminine and masculine characteristics may predict LRS, regardless of sex. Specifically, persons who endorse more feminine characteristics (e.g., gentleness, empathy, sensitivity) are more likely to have high family role salience, and those who are more masculine (e.g., aggressiveness, decisiveness, independence) are more likely to have high work role salience, or breadwinner values (Deaux & LaFrance, 1998; Eagly, Wood, & Diekmann, 2000).

Present Study

The current literature supports that career decision-making difficulty (CDMD) is a key construct in the field of vocational psychology as well as a prevalent issue for the undergraduate student population (Amir & Gati, 2006; Mitchell & Krumboltz, 1987; Osipow, 1999; Osipow, Carney, & Barak, 1976; Savickas, Carden, Toman, & Jarjoura, 1992; Slaney, 1988; Tinsley, 1992); thus, the etiology of the difficulties one experiences when making a career decision deserves continued exploration in the growing body of CDMD literature. A significant relationship between life role salience (LRS) and CDMD has been empirically established in recent studies, with LRS predicting aspects of CDMD (Schedin et al., Unpublished manuscript). However, given its novelty in the literature, further investigation of this relationship is needed to expand implications for clinical use and future research. Given that cultural variables such as race, sex, collectivism/individualism, and religiousness/spirituality have been established as correlates to LRS and CDMD constructs independently (Boone et al., 2013; Chung & Harman 1999; Gomez et al., 2001; Lips-Wiersma, 2001; Mau, 2004; McWhirter, 1997; Raley & Sweeney, 2009), the current study aimed to take the next logical step in exploring how multicultural factors may moderate the relationship between LRS and CDMD.

The current research explored the following research question and hypotheses based on the previous literature: Do multicultural variables (i.e., race, sex, collectivism/individualism, and religiousness/spirituality,) moderate the relationship between anticipated life role salience and career decision-making difficulties (cognitive and emotional/personality)? Hypothesis 1a) Race will moderate or buffer the effects of LRS on CDMD. Hypothesis 1b) Sex will moderate or buffer the effects of LRS on

CDMD. Hypothesis 1c) Individualism/collectivism will moderate or buffer the effects of LRS on CDMD. Hypothesis 1d) Religiousness/spirituality will moderate or buffer the effects of LRS on CDMD.

Based on the implications of the current literature, it would have been ideal to measure participants' masculinity/femininity instead of using sex as a multicultural moderator. It would also have been ideal to measure participants' racial identity instead of using race as a multicultural moderator. Thought was given to the utilization of Conformity to Masculine Norms Inventory (CMNI; Mahalik, Locke, Ludlow, Diemer, Scott, Gottfried, & Freitas, 2003) and Conformity to Feminine Norms Inventory (CFMI; Mahalik et al., 2005), as both are among the most current and valid instruments available for measuring the construct of masculinity/femininity (Parent & Moradi, 2009; Parent & Moradi, 2010). Similar thought was given to adding Black and White racial identity scales. However, due to the number of items on the CMNI (46 items) and CFNI (45 items), it was decided that the survey would become too lengthy with the addition of these and/or other instruments, which could have deterred participation. Additionally, the statistical complexity of the current study would also have increased with the addition of new instruments, which had implications for the author's ability to complete it in a timely manner. Given that the current study was completed as a graduate dissertation and that the proposed study using sex and race as multicultural moderators sufficiently met the complexity requirements for such a project, sex and race were assessed instead of masculinity/femininity and racial identity.

CHAPTER II - METHOD

Participants

Undergraduate college students from a mid-sized, southeastern university were used for the sample of the current study. After data were cleaned and participants who failed validity items were removed, data from 246 (94 male; 174 female) participants were used to ensure sufficient statistical power for the proposed research based on sample size recommendations in the relevant literature for using Structural Equation Modeling, despite the overrepresentation of female participants (McQuitty, 2004; Schumacker & Lomax, 1996). Previous research which used a separate sample from the same student population (Schedin et al., Unpublished manuscript) had a racial distribution of 56% White and 44% Non-White persons, with 89% of the Non-White persons identifying as Black. Based on the generally weak representation of Non-White, Non-Black persons in this population, the current study utilized only participants that identified their race as White or Black to aid in the validity and generalizability of the study's results. Actual race distribution for this sample was 85 Black participants (32%) and 183 White participants (68%). Total N=246. All participants were of traditional college age (i.e., between 18 and 25 years) and had not engaged in any of the assessed life roles previously. These participant criteria were used to increase internal validity, as representation of non-traditional college age students in this sample was not significant enough to present results as applicable for non-traditional college student populations. Similarly insignificant representation was found in this sample for participants not currently engaged in assessed life roles, and given that the LRSS specifically assesses

anticipated life role salience, removal of these participants was theoretically supported for this study.

Procedure

A survey consisting of an informed consent statement, demographic form, and the instruments of the study was advertised via the online research recruitment site for the psychology department, SONA, with the approval of the university's Institutional Review Board. Students currently enrolled in an undergraduate psychology course had access to the SONA database which allowed them to receive class extra credit or fulfill a research requirement for some courses (i.e., PSY 110) for their participation in the survey. The survey was accessible online through the use of Qualtrics.

To assess for careless responding, two validity items were added to the survey. These items explicitly instructed the participant to select a certain answer (e.g., "Select 'disagree' for this item") (Meade & Craig, 2012). Participants who failed to answer one or both validity questions correctly (51 participants) were not allowed to complete the survey and were not given course credit, as was explicitly stated in the informed consent given to participants prior to starting the survey. Data gathered from participants who completed the survey multiple times were removed, eliminating 37 women and 53 men from the data set.

Measures

The Demographic Form prompted participants to indicate their age, sex, race, and college status. This form also prompted participants to indicate whether they are decided or undecided about their college major, and if decided, which major. To assess whether or not participants are currently engaged in any of the four life roles measured by the

LRSS (i.e., Occupational, Parental, Marital, Homecare), participants were asked if they are employed in their desired field of work, if they have children, if they are married, and if they own a home.

The Career Decision Difficulties Questionnaire (CDDQ, Gati et al., 1996) was used in the current study to assess cognition-related facets of career decision-making difficulty. The CDDQ is a 34 item questionnaire that uses a nine point likert-type scale ranging from (1) *Does not describe me well* to (9) *Describes me well*. Thus, the higher the item score, the more the participant identifies that item as being true or characteristic of him or herself. The CDDQ contains three subscales that measure specific areas of career decision-making difficulty. These subscales include: Lack of Readiness, Lack of Information, and Inconsistent Information. An example of an item from the Lack of Readiness Subscale is, “I know that I have to choose a career, but I don't have the motivation to make the decision now (I don't feel like it)”. An example of an item from the Lack of Information Subscale is, “I find it difficult to make a career decision because I do not know what steps I have to take”. An example of an item from the Inconsistent Information subscale is, “I find it difficult to make a career decision because I have contradictory data about the existence or the characteristics of a particular occupation or training program”. High cumulative scores for each subscale can be interpreted as experiencing more difficulty in that area. The current study utilized all three subscales of the CDDQ as the observed variables measuring the latent variable, Cognitive Career Decision-Making Difficulty. The test-retest reliability for the subscales before and after a two day delay period were .79 for Inconsistent Information, .85 for Lack of Information, and .70 for Lack of Readiness (Gati & Amir, 2010). According to Gati and Amir (2010),

the test-retest reliability for the CDDQ total score is .79. The average internal consistency reliability was found to be .86 for the three subscales and .94 for the total score. Internal consistency for each individual subscale has not been reported in the current literature. For the current study, internal consistency for the total score was .95, and for subscales, it was .7 for Lack of Readiness, .96 for Lack of Information, and .94 for Inconsistent Information. Opisow and Gati (1998) documented evidence of construct and concurrent validity for the CDDQ, given the high correlation of its total score with the total scores of the Career Decision-Making Self-Efficacy Scale (Taylor & Betz, 1983) and the Career Decision Scale (Osipow et al., 1976).

The Emotional and Personality-Related Career Decision-Making Difficulties Questionnaire (EPCD, Saka et al., 2008) was used in addition to the CDDQ to assess the emotional and personality-related aspects of career decision-making difficulties. The EPCD was appropriate for the current study's sample according to current research which suggests that emotional and personality-related issues are the most pervasive problems in college students' career decision-making (Amir & Gati, 2006; Amir, Gati, & Kleiman, 2008; Gati & Amir, 2010; Gati et al., 1996; Saka et al., 2008; Santos, 2001). The current study utilized the 25-item short version of the EPCD, created by Gati and colleagues in 2011. Participants were prompted to respond to each item on a nine-point Likert-type scale with responses ranging from (1) *Does not describe me at all* to (9) *Describes me well*. Thus, the higher the item score, the more the participant identifies that item as being true or characteristic of him or herself. The EPCD contains three subscales which are used to measure the following emotion- and personality-specific dimensions of career decision-making difficulties: Self-concept, Anxiety, and Pessimistic Views. An example

of a Self-Concept item is, “I often feel that I am unsuccessful”. An example of an Anxiety item is, “I am stressed because I need to deal with the complex process of choosing a career”. An example of a Pessimistic Views item is, “Few careers are really interesting”. The current study utilized all subscales of the EPCD to represent the latent construct of Emotional/ Personality Related Career Decision-Making Difficulty. High cumulative scores for each subscale can be interpreted as experiencing more difficulty in that area of career decision-making. Gati and colleagues (2011) demonstrated internal consistency reliability for the EPCD subscales with alpha levels of .80 for Pessimistic Views, .91 for Anxiety, and .80 for Self-Concept with a total internal consistency of .91. For the current study, internal consistency for total score was .92; for subscales it was .82 for Pessimistic Views, .94 for Lack of Information, and .92 for Inconsistent Information. Current literature also supports evidence of structural, convergent, and divergent validity for the original and short version of the EPCD (Gati et al., 2011; Saka & Gati, 2007; Saka et al., 2008).

The Life Role Salience Scales (LRSS; Amatea et al., 1986) was used in the current study to measure the anticipated importance and level of commitment that participants attribute to four specific life roles. The salience of these life roles were assessed by the following four subscales: Homecare, Marital, Occupational, and Parental. The LRSS is a 40-item inventory which uses ten items for every role/subscale. An example of a Homecare item is, “It is important to me to have a home of which I am proud”. An example of a Marital item is, “My life would seem empty if I never married”. An example of an Occupational item is, “Having work/a career that is interesting and exciting to me is my most important life goal”. An example of a Parental item is,

“Although parenthood requires many sacrifices, the love and enjoyment of children of one's own are worth it all”. Participants were prompted to respond to all items on a five point Likert-type scale of attitudes ranging from (1) *Disagree* to (5) *Agree* (Amatea et al., 1986). Thus, the higher the item score, the more the participant identifies that item as being true or characteristic of him or herself. High cumulative scores for each subscale can be interpreted as a strong anticipated value or commitment to a role, and low cumulative scores can be interpreted as weak anticipated value or commitment to a role. Total scores for each life role were used as observed, predictor variables in the current study. Amatea and colleagues (1986) demonstrated acceptable internal consistency for the LRSS with reliability coefficients ranging from .79 to .94 and test-retest correlation coefficients ranging from .58 to .87 across subscales; though the time-delay was not reported. For the current study, internal consistency for subscales were .87 for Occupational, .85 for Parental, .85 for Marital, and .91 for Homecare. Evidence of construct validity has also been shown in the current literature with a correlation of .31 ($p < .001$) between the LRSS and Crumbaugh's Purpose-in-Life scales (Crumbaugh & Maholick, 1964; McCutcheon, 1998). It is important to note that the LRSS has been culturally validated for Black African samples in the current literature (Bosch et al., 2012), but not for Black American samples. The findings of this study will be considered in light of this limitation.

The Fetzer Brief Multidimensional Measure of Religiousness/Spirituality

(BMMRS; Fetzer Institute, 1999) was used in the current study to measure participants' self-report of their current religiousness and/or spirituality. Given the latent nature of this instrument (i.e., a total score cannot be calculated), select subscales of this culture-related

variable were used individually to moderate the relationship between anticipated life role salience and career decision-making difficulties. There are a total of ten subscales within the BMMRS; however, only the following five subscales (a total of 16 items) were used to represent the latent variable of Religiousness/Spirituality due to their topical relevance and acceptable psychometric properties: Positive Spiritual Coping (3 items), Daily Spiritual Experience (6 items), Religious Intensity (2 items), Private Religious Practices (3 items), and Public Religious Practices (2 items). The following four subscales were omitted due to unacceptable reliability: Religious/spiritual beliefs and values (.64), Congregation problems (.64), Religious/spiritual forgiveness (.66), Negative religious coping (.54) (Idler et al., 2003). The Congregation Benefits subscale had acceptable validity (.86) (Idler et al., 2003); however, it was also omitted based on the specificity of the scale which would have excluded participants whose religiousness/spirituality did not involve a congregation. Additionally, the term “congregation” has strong Christian connotations in colloquial contexts, presenting additional concerns for limited sample applicability (Yancey & Garland, 2014) and further support for these subscales’ exclusion in the current study. An example of a Positive Spiritual Coping item is, “I think about how my life is part of a larger spiritual force”. An example of a Daily Spiritual Experience item is, “I feel deep inner peace or harmony”. An example of a Religious Intensity item is, “To what extent do you consider yourself a spiritual person?” An example of a Private Religious Practices item is, “Within your religious or spiritual tradition, how often do you meditate?” An example of a Public Religious Practices item is, “How often do you attend religious services?” Item response options vary between subscales, using dichotomous and Likert-type formats. Lower scores on any of the

BMMRS subscales can be interpreted as a stronger endorsement of religiousness/spirituality and higher scores indicate a weaker endorsement of religiousness/spirituality for that participant. However, for the purposes of this study, item scores were reversed following data collection to aid in the interpretation of results, given that higher scores indicated stronger identification in all other measures used. Idler and colleagues (2003) demonstrated reliability for the BMMRS subscales of interest as good to acceptable given alpha levels of .72 for Private Religious Practices, .81 for Positive Spiritual Coping, .77 for Religious Intensity, and .91 for Daily Spiritual Experience. For the current study, internal consistencies for subscales were .94 for Daily Spiritual Experience, .75 for Private Religious Practices, .82 for Public Religious Practices, .84 for Positive Spiritual Coping, and .77 for Religious Intensity. Significant correlations between the BMMRS and the General Social Survey (an annual collection of data from the American population regarding various aspects of societal functioning including self-reported religiousness/ spirituality) show support for BMMRS construct validity (General Social Survey, 1998).

The Horizontal and Vertical Individualism and Collectivism Scale (HVIC; Triandis & Gelfand, 1998) was used in the current study to assess participants' identification with individualist and collectivist attitudes and behaviors. The four subscales of this culture-related scale were used to represent the latent variable of individualism/collectivism to moderate the relationship between anticipated life role salience and career decision-making difficulties. The short version of the HVIC used in this study is comprised of 16 of the original 32 pilot items (Singelis, Triandis, Bhawuk, & Gelfand, 1995) and uses four items for each of the following subscales: Horizontal

Individualism (HI), Vertical Individualism (VI), Horizontal Collectivism (HC), and Vertical Collectivism (VC). The subscales of this instrument represent four separate constructs in which the term “horizontal” refers to a preference for societal equality and “vertical” refers to a preference for societal hierarchy or status. An example of an HI item is, “I often do ‘my own thing’”. An example of VI is, “It is important that I do my job better than others”. An example of HC is, “The well-being of my co-workers is important to me”. An example of VC is, “It is my duty to take care of my family, even when I have to sacrifice what I want”. Responses to all items on the HVIC are indicated on a 9-point Likert-type scale of attitudes ranging from (1) *Highly Disagree* to (9) *Highly Agree*; thus, the higher the item score, the more the participant identifies that item as being true or characteristic of him or herself and therefore identifies more strongly with the associated subscale. Acceptable internal reliability has been demonstrated for the two global constructs of individualism (.78) and collectivism (.84) measured by this instrument as well as for all four constructs represented by each subscale (HI: .78; VI: .75; HC: .77; VC: .83) (Gyorkos et al., 2012). For the current study, internal consistencies for subscales were .81 for Horizontal Individualism, .79 for Vertical Individualism, .84 for Horizontal Collectivism, and .84 for Vertical Collectivism. Construct and divergent validity evidence for the HVIC also has been shown to be “good” when compared to the Individualism-Collectivism Scale (IND-COL; Singelis et al., 1995), with significant correlations among the horizontal dimensions ($r = .20, p < .01$), vertical dimensions ($r = .14, p < .05$), and collectivism dimensions ($r = .39, p < .001$); however, the individualism scales were not significantly correlated (Cozma, 2011). Test-

retest results for the HVIC are currently absent from the literature at this time (Cozma, 2011).

CHAPTER III - RESULTS

Due to the multivariate nature of the data and related research questions, Structural Equation Modeling (SEM) was the chosen approach to data analysis in efforts to best capture the presence of inter-relationships, as opposed to other analytical approaches (e.g., multiple regression). A total of 11 separate SEM models (see Figure 1) were constructed and used to assess for the moderator effects of cultural variables on the relationship between anticipated Life Role Salience and Career Decision-Making Difficulty (Sun, Konold, & Fan, 2011). Models included race (1 model), sex (1 model), individualism/collectivism (4 models, one for each subscale), and religiousness/spirituality (5 models, one for each subscale). The four areas of Life Role Salience were measured by observed variables (Parental LRS, Marital LRS, Homecare LRS, and Occupational LRS) and the two areas of Career Decision-Making Difficulties were measured by latent variables (i.e., Cognitive CDMD and Emotional/Personality CDMD). The latent construct of Cognitive CDMD was composed of three observed variables (i.e., Lack of Readiness, Lack of Information, and Inconsistent Information). The latent construct of Emotional and Personality-Related CDMD was composed of three observed variables (i.e., Pessimistic Views, Anxiety, and Self-Concept). Sex variables were dummy coded as either woman or man, and racial variables were coded as either White or Black.

To address research hypothesis 1a, the model tested if the categorical variable of race (i.e., Black or White) was a moderator of the relationship between anticipated Life Role Salience and CDMD. To address research hypothesis 1b, the model tested if the categorical variable of sex (i.e., Male or Female) was a moderator of the relationship

between anticipated Life Role Salience and CDMD. To address research hypothesis 1c, four separate models using the four HVIC subscale scores tested if any of the observed variables of individualism/collectivism were a moderator of the relationship between anticipated Life Role Salience and CDMD. To address research hypothesis 1d, five separate models using the five BMMRS subscale scores tested if any of the observed variables of religiousness/spirituality were a moderator of the relationship between anticipated Life Role Salience and CDMD.

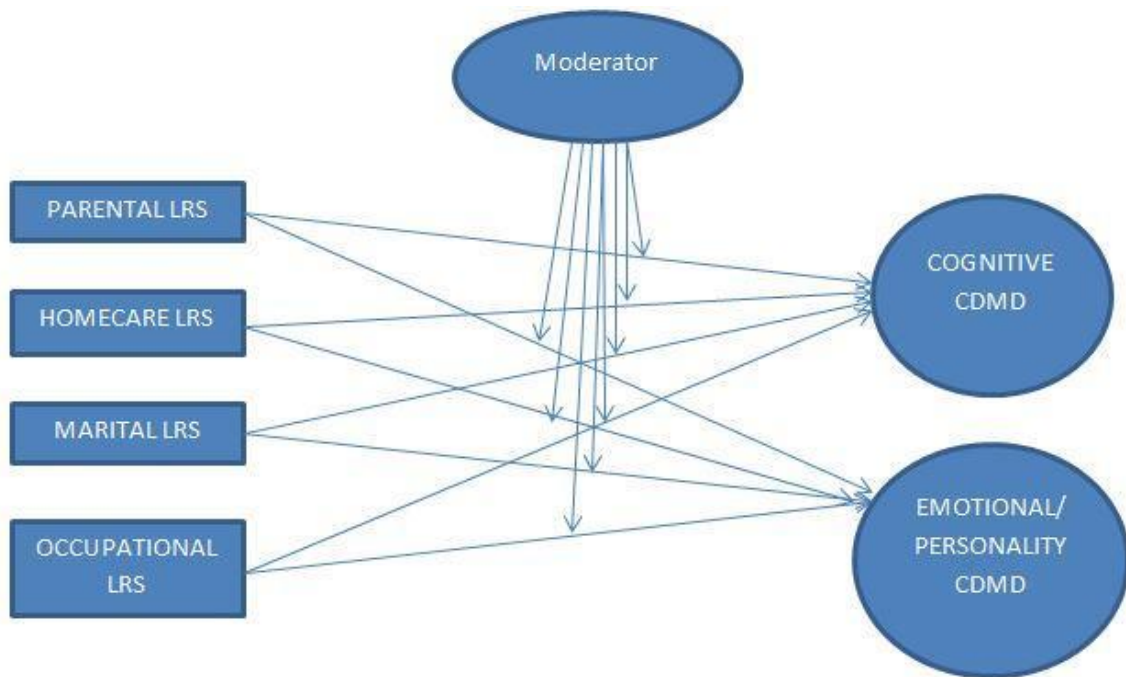


Figure 1. Moderated Structural Equation Model.

This study utilized 11 separate models to test the following moderators separately: Race, Sex, Horizontal Individualism, Vertical Individualism, Horizontal Collectivism, Vertical Collectivism, Positive Spiritual Coping, Daily Spiritual Experience, Religious Intensity, Private Religious Practices, and Public Religious Practices. LRS= Life Role Salience; CDMD= Career Decision-Making Difficulty.

Preliminary Procedures

The data set was cleaned prior to analysis in order to detect and address any missing data or extreme values. Mahalanobis testing was utilized in addition to descriptive and fit statistics to test for the presence of outliers. Results of these tests indicated that data set did not contain any problematic values in regard to these preliminary assessments. Finally, participants who indicated that they were currently engaged in any of the assessed life roles were also removed from the data set (i.e., 6 were currently married, 9 were currently parents, 7 were homeowners, and none were currently engaged in their desired career position). Linear Trend at Point was used to replace missing values (37 values, or 15% of total N replaced, no specific item/subscale patterns). The final sample N was 246. All LRSS subscales and all continuous variables were centered prior to creating interaction terms.

Descriptive statistics were computed for the sample of this study to ensure that internal consistency of this data was adequate, indicated by a minimum reliability level of $\alpha = .70$ (see Table 1). Mean, standard deviation, range and alphas in the current study were consistent with previous literature for all variable measures (CDDQ: Gati & Amir, 2010; Opisow & Gati, 1998; EPCD: Gati et al., 2011; Saka & Gati, 2007; Saka et al., 2008; LRSS: Amatea et al., 1986; Bosch et al., 2012; BMMRS: Idler et al., 2003; HVIC: Gyorkos et al., 2012). Given the acceptable fit for all 11 models, as indicated by a comparative fit index (CFI) $> .95$ (Hu & Bentler, 1999), a root mean square error of approximation (RMSEA) $< .05$ (McQuitty, 2004), and appropriate Chi Square (χ^2 ; Barrett, 2007), each research question was addressed separately. For each of the 11 models, the overall fit of the model was assessed under two conditions: One in which

directional paths in the model were unconstrained, (thus allowing for the relationship between anticipated Life Role Salience and CDMD to vary as a function of the moderator variable); another, in which the model is constrained, (thus removing any changes in the relationship accounted for by the moderator variable) to test for the presence of moderation effects. The chi-square for each condition was referenced as an indicator of model fit. If the non-constrained condition demonstrates a significantly better fit (significantly decreased chi-square) than the constrained condition, the results support the hypothesis that the moderator variable in that model accounts for significant changes in the relationship between anticipated Life Role Salience and CDMD (Holmbeck, 1997).

Table 1

Internal Consistency, Correlations, and Range for All Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. LRSS-O																			
2. LRSS-P	.31																		
3. LRSS-M	.20	.50																	
4. LRSS-H	.50	.50	.50																
5. EPCD-PV	-.30	-.20	-.20	-.30															
6. EPCD-Ax	-.12	-.07	.02	-.08	.60														
7. EPCD-SI	-.20	-.10	.01	-.20	.50	.60													
8. CDDQ-R	.40	-.04	-.04	-.05	.40	.40	.40												
9. CDDQ-LI	-.30	-.20	-.12*	-.30	.7	.70	.50	.50											
10. CDDQ-II	-.30	-.20	-.17	-.40	.70	.60	.50	.40	.70										
11. BMMRS-DSE	-.20	-.30	-.30	-.30	.06	.10	.15	.12*	.12	.10									
12. BMMRS-PrP	-.002	-.15	-.11	-.13	-.02	.03	.07	.07	.01	-.02	.07								
13. BMMRS-PuP	.02	-.10	-.12*	-.10	-.03	.03	.04	.02	-.02	-.04	.60	.80							
14. BMMRS-PSC	-.20	-.30	-.20	-.20	.05	.08	.17	.07	.10	.09	.90	.70	.60						
15. BMMRS-RI	-.01	-.30	-.20	-.15	.08*	.17	.17	.12	.10	.09	.73	.70	.60	.80					
16. HVIC-HI	.35	.05	.04	.20	-.20	-.09	-.10	-.07	-.20	-.20	-.05	-.01	.06	-.07	.001				
17. HVIC- VI	.10	-.01	.13	.04	.12	.13	.12*	.14	.10	.10	.30	.07	.07	.03	.08	.30			
18. HVIC-HC	.50	.40	.20	.40	-.10	-.50	-.10	.10	.14	-.20	-.30	-.22	-.13	-.20	-.18	.30	.10		
19. HVIC-VC	.40	.50	.40	.50	-.12	-.01	-.10	.03	-.17	-.20	-.40	-.20	-.22	-.40	-.30	.30	.13	.60	
M	38	40	37	40	20	32	31	43	41	30	15	14	8	6	4	28	20	28	2

																			8
SD	6	8	7	7	9	14	12	10	23	17	8	6	3	3	2	6	7	6	6
Range	22-50	10-50	14-50	20-50	6-49	8-63	8-64	17-78	12-108	10-72	6-36	4-24	4-12	3-12	2-8	6-36	4-36	6-36	1-36
Possible Range	10-50	10-50	10-50	10-50	6-54	8-72	8-72	10-90	12-108	10-90	6-36	4-32	2-12	3-12	2-8	4-36	4-36	4-36	4-36
Alpha	.87	.85	.85	.91	.8	.90	.80	.70	.96	.94	.94	.75	.82	.84	.77	.81	.79	.84	.84

Note: CDDQ= Career Decision-Making Questionnaire; EPCD= Emotional and Personality-Related Career Decision-Making Questionnaire; LRSS= Life Role Saliency Scale; BMMRS= Fetzer Brief Multidimensional Measure of Religiousness/Spirituality; HVIC= Horizontal and Vertical Individualism and Collectivism Scale. Correlations above .11 are significant at $p < .01$, correlations above .17 are significant at $p < .001$

Data Analysis

CFA

Confirmatory Factor Analysis (CFA) was conducted for EPCD and CDDQ simultaneously to establish their measurement validity, which yielded satisfactory fit [DF: 8; $X^2(8) = 21.12$; CFI=.98; TLI = .97; RMSEA = .08 (90% CI .04-.12)]. Additional CFAs were conducted to assess LRSS subscales due to negative correlation values for all 10 reverse-score items when assessing the validity of the LRSS (despite verification that reverse-score items were coded correctly). One CFA was created to include reverse-score items (CFI range: .80 to .87; RMSEA range: .12 to .18) and another was created to excluded reverse-score items (CFI range: .81 to .91; RMSEA range: .15 to .26), both of which suggested a poor fit to the data. This suggested a high correlation between items and, given the similarities in wording for certain items, correlating these items within the model was theoretically supported. Due to higher alpha levels for the CFA model that excluded reverse-score items, these scales were used in the correlation model. The addition of these correlations significantly increased the fit of the LRSS CFA (see Table 2). The following items were correlated for each subscale: Homecare (VIII.2 to VIII.3; VIII.3 to VIII.4), Occupational (I.1 to I.2; I.4 to I.5), Parental (III.2 to III.5), and Marital (VI.3 to VI.5; VI.1 to VI.3).

Table 2

CFA Model Fit

CFA name	DF	Chi-square	CFI	TLI	RMSEA
CFA_EPCD_CDDQ	8	21.12	0.98	0.97	0.08
LRSS_H_corr	12	122.94	0.92	0.86	0.19
LRSS_H_sansR	14	268.63	0.81	0.72	0.26
LRSS_O_corr	18	58	0.96	0.94	0.09
LRSS_O_sansR	20	155.67	0.87	0.81	0.16
LRSS_P_corr	18	48.22	0.95	0.91	0.14
LRSS_P_sansR	9	82.49	0.91	0.81	0.17
LRSS_M_corr	25	67.78	0.97	0.95	0.08
LRSS_M_sansR	27	188.06	0.87	0.85	0.15

Note: CFA output assessing CDMD model fit (EPCD and CDDQ) and LRSS model fit with and without reverse-scored items.

CDDQ= Career Decision-Making Questionnaire; EPCD= Emotional and Personality-Related Career Decision-Making Questionnaire;

LRSS= Life Role Salience Scale; O= Occupational; P= Parental; M= Marital; H= Homecare. LRSS variables with “_sansR” indicate subscales with omission of reverse-scored items.

Moderators

Results (Table 3) of moderation analyses (for variables of sex, race, collectivism/individualism, and religiousness/spirituality) suggest that religiousness/spirituality was the only construct that moderated the relationship between life role salience and career decision-making difficulty. More specifically, these results suggest that one's daily spiritual experience (i.e., DSE subscale of the BMMRS) is the only facet of religiousness & spirituality that had significant moderating effects on the relationship between LRS and CDMD (see Figure 2).

Table 3

Moderator Models

Moderation	DF difference	Chi-square difference	Critical Value	Fit sig worse?
Sex	7	8	14	No
Race	7	9	14	No

HI_HVIC	36	51	51	No
VI_HVIC	36	51	51	No
HC_HVIC	36	38	51	No
VC_HVIC	36	35	51	No
DSE_BMMRS	36	61	51	Yes
PrP_BMMRS	36	47	51	No
PuP_BMMRS	36	50	51	No
PSC_BMMRS	36	46	51	No
RI_BMMRS	36	48	51	No

Note: SEM output assessing significance of all moderator variables (i.e., sex, race, horizontal individualism, vertical individualism, horizontal collectivism, vertical collectivism, daily spiritual experience, private religious practice, public religious practice, positive spiritual coping, and religious intensity). BMMRS= Fetzer Brief Multidimensional Measure of Religiousness/Spirituality; DSE= Daily Spiritual Experience; PrP= Private Religious Practice; PuP= Public Religious Practice; PSC= Positive Spiritual Coping; RI= Religious Intensity; HVIC= Horizontal and Vertical Individualism and Collectivism Scale; HI= Horizontal Individualism; VI= Vertical Individualism; HC= Horizontal Collectivism; VC= Vertical Collectivism.

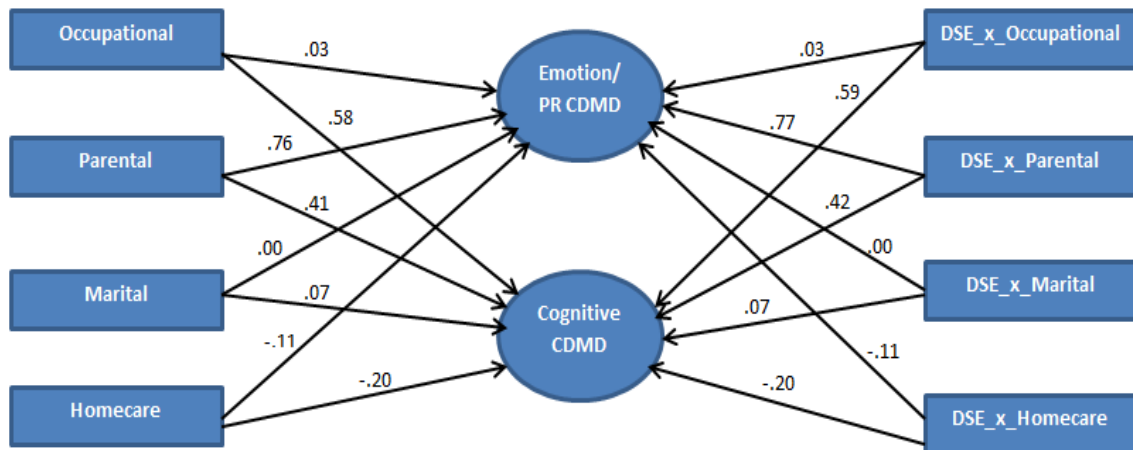


Figure 2. DSE Moderator Model.

Note: SEM model assessing the significance of DSE moderator, including path weights. "DSE_x_" indicates interaction term between DSE and whichever LRSS main effect is stated after.

Invariance testing

Invariance testing was completed in order to identify the specific ways in which the DSE subscale scores moderated the relationship between LRS and CDMD. DSE

subscale scores were divided into groups of Low, Moderate, and High scores by tertiary split (equal 1/3 percentiles) of the data via creation of new variables:

- 0-33%: -16.71 to -16.15 = Low (coded “1”)
- 33-66%: -16.15 to -15.53 = Med (coded “2”)
- 66-100%: -15.53 to -13.06 = High (coded “3”)

Model comparisons were then completed to establish between which groups the model fit became significantly better. Results of these model comparisons suggest that the moderation significance for DSE scores exists between the Low and Moderate groups (i.e., L/M) and Low and High groups (i.e., L/H) (see Table 4).

Table 4

DSE Model Comparisons

DSE Model Comparisons	DF difference	Chi-square difference	Critical Value	Fit sig. worse?
L/M	18	36.5	28.9	Yes
M/H	18	15	28.9	No
L/H	18	43.7	28.9	Yes

Note: SEM output assessing the DSE moderation model when low, moderate, and high DSE scores are constrained separately over three analyses. L= low; M= moderate; H= high.

For both L/M and L/H models, main effects were tested separately. Before testing interaction effects, main effect paths that were not significantly different were constrained to be equal. Two main effects for the L/M model were found to significantly increase fit, including Occupational and Marital LRS scores. Occupational LRS was the only main effect to significantly increase fit for the L/H model (see Table 4).

Table 5

DSE Main Effects

DSE Main Effects	DF difference	Chi-square difference	Critical Value	Fit sig. worse?
L/M_Occ	2	11.4	5.99	Yes
L/M_Par	2	0.3	5.99	No
L/M_Mar	2	8.4	5.99	Yes
L/M_Hom	2	3.9	5.99	No
L/H_Occ	2	12.1	5.99	Yes
L/H_Par	2	4.8	5.99	No
L/H_Mar	2	4.8	5.99	No
L/H_Hom	2	4	5.99	No

Note: SEM output assessing the main effects (i.e., LRSS subscales) of the moderation model when low, moderate, and high DSE scores are constrained in separate analyses. L= low; M= moderate; H= high; Occ= Occupational; Par= Parental; Mar= Marital; Hom= Homecare.

To explore the multivariate nature of the data, interrelationships among the main effects and interaction terms were assessed separately and simultaneously. All interaction effects (DSE x each LRSS subscale) were added to the adjusted main effect constrained model to assess whether or not any aspects of the interactions would cause a significant change in model fit. For both L/M and L/H models, fit became significantly better when all interactions were added (see Table 5). Thus, individual testing of each interaction effect was warranted in order to identify which specific interaction effect was contributing to this change.

Table 6

DSE Interactions

DSE Interactions	DF difference	Chi-square difference	Critical Value	Fit sig. worse?
L/M_DSE+P+H+interactions	14	32.7	23.7	Yes
L/H_DSE+P+M+H+interactions	16	43.6	26.3	Yes

Note: SEM output assessing all interaction terms with all significant main effects (i.e., LRSS subscales) of the moderation model when low, moderate, and high DSE scores are constrained in separate analyses. . DSE= Daily Spiritual Experience; L= low; M= moderate; H= high; P= Parental; M= Marital; H= Homecare.

For the individual interaction tests, multiple interaction terms were included simultaneously (as opposed to testing the main effects and one interaction term at a time), as the moderator is consistent for all interaction terms; Thus, this approach is supported considering the multivariate nature of the data when exploring these inter-relationships. For L/M model, interaction effects between DSE and Occupational LRS, as well as between DSE and Marital LRS resulted in significant decreases in model fit. All interaction effects resulted in significant decrease in L/H model fit (see Table 6). These individual interaction tests suggest that people who had medium DSE scores had significant changes in CDMD depending on their Occupational and Marital LRS. Additionally, people who had high DSE scores had significant changes in CDMD depending on all four roles (see Table 7).

Table 7

DSE Individual Interaction Tests

DSE Individual Interaction Tests	DF difference	Chi-square difference	Critical Value	Fit sig. worse?
L/M_DSE+P+H+DxO	8	16.5	15.5	Yes
L/M_DSE+P+H+DxM	8	16	15.5	Yes
L/M_DSE+P+H+DxH	8	6.3	15.5	No
L/M_DSE+P+H+DxP	8	7.5	15.5	No
L/H_DSE+P+M+H+DxO	10	28.6	18.3	Yes
L/H_DSE+P+M+H+DxM	10	24.9	18.3	Yes
L/H_DSE+P+M+H+DxH	10	28	18.3	Yes
L/H_DSE+P+M+H+DxP	10	27	18.3	Yes

Note: SEM output assessing individual interaction effects to determine which specific interactions are affecting model fit. DSE= Daily Spiritual Experience; L= low; M= moderate; H= high; P= Parental; M= Marital; H= Homecare; DxO= interaction term for DSE and

Occupational LRS; DxM= interaction term for DSE and Marital LRS; DxH= interaction term for DSE and Homecare LRS; DxP= interaction term for DSE and Parental LRS.

In summary, the only multicultural variable that was found to moderate the relationship between anticipated LRS and CDMD was a specific subscale related to the construct of religiousness/spirituality; Daily Spiritual Experience (DSE). As the participants' Marital role salience and DSE increase, CDMD decreases. As participants' Parental role salience and DSE increase, CDMD increases. For Homecare and Occupational role salience, there were different directional patterns for both Cognitive and Emotional CDMD. This study suggests that as participants' Homecare role salience and DSE increase, their Cognitive CDMD decreases but Emotional CDMD increases. Additionally, these results suggest that as participants' Occupational role salience and DSE increase, their Cognitive CDMD increases but Emotional CDMD decreases.

CHAPTER IV - DISCUSSION

The current research aimed to explore whether or not multicultural factors (i.e., race, sex, collectivism/individualism, and religiousness/spirituality) would moderate or buffer the effects of anticipated life role salience on career decision-making difficulties (measured by both cognitive and emotional/personality factors). The sample used in the current study excluded any participants that are already currently engaged in any of the four life roles that were assessed (i.e., Occupational, Parental, Marital, Homecare). This was done intentionally to increase the internal validity of results, given the poor representation of participants that were engaged in those four life roles at the time the survey was taken (i.e., 12 total participants) and the fact that the hypotheses and instrument (i.e., LRSS) used in the current study are specific to *anticipated* LRS, not current LRS (Zimmerman, Chelminski, & Posternak, 2004). Thus, the clinical implications for the current study are specific to traditional-age undergraduate students that are not currently engaged in their desired career position, do not have children, are not married, and are not homeowners. The theoretical foundation of this study is based on previous literature supporting significant relationships between LRS and CDMD (Schedin et al., under review) and subsequent research that has established each of the aforementioned cultural variables as confounds to LRS and CDMD constructs independently (Boone et al., 2013; Chung & Harman 1999; Gomez et al., 2001; Lips-Wiersma, 2001; Mau, 2004; McWhirter, 1997; Raley & Sweeney, 2009). Results of this study suggest that one particular aspect of religiousness/spirituality (i.e., daily spiritual experience) had significant moderating effects on the relationship between LRS and

CDMD, whereas controlling for race, sex, and measurements of collectivism and individualism did not cause significant changes in the relationship between CDMD and LRS for this sample.

Research Question 1a

It was initially hypothesized that the relationship between anticipated LRS and current CDMD would be significantly different depending on one's race. The sample for the current study included statistically sufficient representation of both Black and White participants. However, results of data analyses for this study suggest that the relationship between anticipated LRS and current CDMD did not significantly differ between Black and White participants. Thus, results did not support the hypothesis that race would have significant moderator effects on the relationship between anticipated LRS and current CDMD. Although this finding may be representative of a generalized trend (i.e., that race truly does not moderate the relationship between LRS and CDMD for the general public), the strength of the literature that theoretically supported this hypothesis warrants serious consideration of the limitations of this study. Namely, the lack of diverse racial representation in the original sample, warranting the exclusive inclusion of White and Black participants (see Limitations and Directions for Future Research). Given that the demographic variable of race was used as a proxy for assessing racial identity in the current study, it may be the case that the theoretical support for this hypothesis did not hold based on that discrepancy in methodology. Despite these potential explanations for this finding, it is important to entertain the idea that this finding is representative of a true lack of significance for race/racial identity as a moderator. This finding might suggest

that the high correlation between race and life role salience (found in Schedin et al., under review) creates such racially-specific differences in LRS endorsements that CDMD does not differ in terms of race once LRS is accounted for.

Research Question 1b

It was initially hypothesized that the relationship between anticipated LRS and current CDMD would be significantly different depending on one's sex. The sample for the current study included statistically sufficient representation of both male and female participants. However, results of data analyses for this study suggest that the relationship between anticipated LRS and current CDMD did not significantly differ between male and female participants. Thus, results did not support the hypothesis that sex would significantly moderate the relationship between anticipated LRS and current CDMD. This hypothesis was theoretically supported by the existing research on sex; however, it is important to note that the literature on sex and the literature on gender have recently received strong criticism for the use of terms "sex" and "gender" interchangeably or incorrectly, either within the manuscript text or within methods of data collection (e.g., wording of demographic survey) (Westbrook & Saperstein, 2015). In other words, we cannot assume males and females espouse sex-congruent role expectations in terms of femininity and masculinity (i.e., indicators of gender). This presents one potential explanation for the non-significance of sex as a moderator in the current study, as the theoretical foundation for the hypothesis may not have been a sound representation of the targeted construct for this variable. However, given that the demographic variable of sex was used as a proxy for assessing femininity/masculinity in the current study, it may be

the case that the theoretical support for this hypothesis did not hold based on that discrepancy in methodology. Despite these potential explanations for this finding, it is important to entertain the idea that this finding is representative of a true lack of significance for sex/femininity/masculinity as a moderator. This finding might suggest that the high correlation between sex and life role salience (found in Schedin et al., under review) creates such sex-specific differences in LRS endorsements that CDMD does not differ in terms of sex once LRS is accounted for.

Research Question 1c

It was initially hypothesized that the relationship between anticipated LRS and current CDMD would be significantly different depending on one's identification with more individualistic or collectivistic cultures (i.e., values, beliefs, and customs). However, results of data analyses for this study suggest that the relationship between anticipated LRS and current CDMD did not significantly differ between individualist and collectivist participants. Thus, results did not support the hypothesis that collectivism/individualism would have significant moderator effects on the relationship between anticipated LRS and current CDMD. See Limitations and Directions for Future Research for a thorough review of culturally-related confounds that may have influenced this outcome.

Research Question 1d

It was initially hypothesized that the relationship between anticipated LRS and current CDMD would be significantly different depending on one's level of religiousness or spirituality. The instrument used to measure the multicultural construct of

religiousness/spirituality (i.e., BMMRS) was intentionally abbreviated for this study to include five of the ten subscales based on these subscales' clinical relevance to the research question at hand. Thus, the five subcategories of this construct that were assessed included: Positive Spiritual Coping, Daily Spiritual Experience, Religious Intensity, Private Religious Practices, and Public Religious Practices. Results of this study suggest that the relationship between anticipated LRS and current CDMD did significantly differ depending on participants' religiousness/spirituality, but only in terms of Daily Spiritual Experience (DSE). Thus, the hypothesis that religiousness/spirituality would have significant moderator effects on the relationship between anticipated LRS and current CDMD was partially supported in the current study.

The directional details of DSE as a significant moderator are interesting in that, depending on which life role one has high salience in, high DSE can either significantly increase or significantly decrease the level of CDMD one experiences. To make things even more complex, some of these directional patterns were different in terms of Cognitive and Emotional/Personality-Related (PR) CDMD. For the interpretation of these results, it is important to acknowledge the difference between DSE and the other BMMRS subscales. Daily Spiritual Experience is a construct that has been explored in more detail since the development of the Daily Spiritual Experience Scale (DSES; Underwood & Teresi, 2002).

The DSES was released three years after the BMMRS and simply added 10 additional items to the original 6 DSE subscale items of the BMMRS. In essence, the construct of Daily Spiritual Experience is specific to ordinary, daily spiritual experiences

(i.e., a feeling of general connectedness to the transcendent and/or creation) as opposed to miraculous experiences or life-changing divine intervention (Ellison & Fan, 2008). In contrast to other BMMRS subscales that target specific behavior or religious/spiritual “practices” (e.g., frequency of prayer and engagement in religious congregational activities), DSE items capture “meta” themes that allow for more flexible applicability to non-Judeo-Christian motifs of religion and spirituality (Underwood 2006; Underwood & Teresi 2002). These differences between scales may account for the insignificant outcomes of all other BMMRS moderators in the current study. Thus, DSE may have been the only significant religiousness/spirituality moderator because it measures a broader, more inclusive aspect of religiousness/spirituality, which was applicable to the majority of this student sample. Another possibility is that DSE may be a better representation of the construct of spirituality as opposed to religiousness, though the BMMRS does not distinguish which of its scales adhere more strongly to one or the other given that they are not mutually exclusive constructs. Therefore, it is possible the significance of DSE as a moderator suggests differences based on the construct of spirituality, whereas the construct of religiousness does not have moderating effects on the relationship between LRS and CDMD.

DSE & Roles without Differences between Cognitive and Emotional/PR CDMD

Marital and Parental role salience showed the same directional patterns for both Cognitive and Emotional/PR CDMD. This study suggests that as participants’ Marital role salience and DSE increase, CDMD decreases. In other words, when someone who strongly values his or her marital role also has high levels of Daily Spiritual Experience,

he or she tends to have an easier time making a career decision. This study also suggests that as participants' Parental role salience and DSE increase, CDMD increases. In other words, when people strongly value their parental role *and* have high levels of Daily Spiritual Experience, they tend to have a harder time making a career decision. These findings are in direct opposition to a previous study that assessed the direct (unmoderated) relationship between LRSS and CDMD using a similar sample to this study. Schedin et al. (in review) found that higher Marital role salience resulted in increased CDMD and higher Parental role salience resulted in decreased CDMD. Thus, comparisons between the former and current study suggest that one's DSE is significant enough to reverse the direction of these relationships (i.e., Marital LRS & CDMD, and Parental LRS & CDMD).

Marital Life Role Salience. The breadth of literature linking religiousness/spirituality to important psychological constructs allows for many speculations about the most influential mechanisms of this moderation. Given that high Marital LRS and high DSE seems to decrease CDMD, it makes sense to start by discussing the literature on how DSE might ease the career decision-making process. Consider the premise that, for the general population, making a career decision is a relatively stressful process. There is a large body of research asserting that aspects of religion/spirituality can significantly decrease the amount of distress experienced by persons faced with conflict or stressful conditions, such as bereavement, health problems, or any personal difficulty (Cook & Wimberley, 1983; Ellison, 1991; Ellison et al., 2001; Krause, 2006; Strawbridge et al., 1998).

Further, the current literature on spirituality/religiousness specific to decision-making appears to be in agreement that one's spiritual beliefs are often reflected in their global values and moral schemas, which can affect the filtering of information in the decision-making process (Fernando & Chowdhury, 2010; Phipps, 2012). The clinical construct of a schema inherently suggests a function of analyzing and assessing information within a pre-existing framework or lens, a process that takes less time and energy than interpreting novel information for which there is no previously constructed schema. Thus, it may be the case that participants with higher DSE scores (indicating higher levels of religiousness/spirituality) are more likely to have schemas in place for existential issues that often come into consideration when making a career decision, such as one's life purpose/meaning and prioritization of life roles.

This efficiency of filtering and analyzing career-related information would, in the context of current career theory, have extremely important implications for the level of difficulty one experiences in the career decision-making process. Cognitive Information Processing (CIP) is a structured approach to career counseling that designates a significant amount of time to the process of narrowing down possible career options (i.e., "crystallization") in the context of one's values (Sampson, Reardon, Peterson, & Lenz, 2004). Since the teaching of most major religions emphasize engagement in family roles over work roles (Edgell, 2005; Sherkat & Ellison, 1999; Wilcox et al., 2004), it may be the case that persons with high Marital role salience and high DSE have a solid schema for prioritization of work and family (e.g., marital) roles, thus allowing for a smooth

crystallization process and less difficulty in the career decision-making process as a whole.

Parental Role Salience. If the latter argument were true, then why would high DSE make it more difficult for persons with high Parental LRS (another family role) to make a career decision? One possibility is that taking on and maintaining a parental role (as opposed to a marital role), in most cases, requires serious consideration of income and financial stability. According to the U.S. Department of Agriculture, raising a child born in 2013 would cost an average of \$245,340 to care for them until 18 years of age (May & Poppe, 2015). Moreover, “The annual cost of having two children in a child care center full time is the highest single household expense in the Northeast, Midwest and South” (p. 1). This, in addition to the increasing prevalence of the dual-earner household (Marks, 2006; U.S. Department of Labor, Bureau of Labor Statistics, 2009), may suggest that pre-existing religious/spiritual-based schemas about prioritizing family roles over work roles creates a problematic inflexibility in the career decision-making process (Fernando & Chowdhury, 2010; Phipps, 2012). In other words, it is understandable that one would feel torn in the career decision-making process if their priority is to raise their children, but to do so requires the pursuit of a demanding career that will pay the bills, yet will take away time spent with the children. Schedin and colleagues (Unpublished manuscript) offer additional support for this theory in that higher levels of religiousness/spirituality was correlated to higher family (i.e., Marital and Parental) role salience, which may suggest an increased strength or rigidity in religious/spiritual schemas for persons with high family role salience.

DSE & Roles with Differences between Cognitive and Emotional/PR CDMD

Homecare and Occupational role salience, on the other hand, showed different directional patterns for both Cognitive and Emotional/Personality-Related CDMD. This study suggests that as participants' Homecare role salience and DSE increase, their Cognitive CDMD decreases but Emotional/PR CDMD increases. In other words, when someone who strongly values their role as a homemaker also has high levels of Daily Spiritual Experience, they tend to have an easier time with the Cognitive aspects of career decision-making and a harder time with the Emotional/Personality-Related aspects of career decision-making. Additionally, this study suggests that as participants' Occupational role salience and DSE increase, their Cognitive CDMD increases but Emotional/PR CDMD decreases. In other words, when someone who strongly values their occupational role also has high levels of Daily Spiritual Experience, they tend to have a harder time with the Cognitive aspects of career decision-making and an easier time with the Emotional/Personality-Related aspects of career decision-making.

Homecare Role Salience. To speculate about the mechanisms responsible for the results specific to Homecare LRS, it seems most appropriate to focus on the differences between Cognitive and Emotional/PR CDMD. In the current study, the CDDQ was utilized to assess the more cognitive aspects of career decision-making difficulty. By referencing the subscales of this measure, it is implied that participants with high Homecare LRS and high DSE experience sufficient "readiness" to make a career decision and perceive their knowledge/information of career options to be consistent and plentiful. Basically, they experience a sense of ownership and understand of the external variables

they have control over in the career decision-making process (Gati et al., 1996). In terms of managing external variables, it may be relevant to acknowledge the research asserting that higher levels of Daily Spiritual Experience have been correlated with better outcomes for persons struggling with epilepsy, caregiver burnout, and arthritis pain (Dunn, Chapelski, Wordlaw, & Massanari, 2004; Fowler & Hill, 2004; Hayton, 2002; Holland & Niemeyer, 2006; Keefe et al., 2001; Pearce et al., 2003).

In the current study, the EPCD was used to assess more emotional and personality-related aspects of career decision-making difficulty. By referencing the subscales of this measure, it is implied that participants with high Homecare LRS and high DSE experience more pessimistic views and beliefs about the world of work, more anxiety about the future and fear of failing, and have less developed self-identity and lower self-esteem. Due to the current lack of literature specific to high homecare role salience and the kinds of people who tend to endorse it, it is difficult to even speculate about the meaning of this finding. Considering the organizational and cleaning aspects of a homecare role, the existing literature on anxiety-related disorders and cleaning may be of some relevance (Yorulmaz, Karanci, & Tekok-Kiliç, 2006), though this does not explain how DSE contributes to the picture. In other words, it is possible that these individuals know how to make career choices, but report feeling anxious about it.

Occupational Role Salience. To address the findings for Occupational LRS, Cognitive and Emotional/PR CDMD will again be discussed, though the pattern is opposite of Parental LRS. It is implied that participants with high Occupational LRS and high DSE lack “readiness” to make a career decision and perceive their

knowledge/information of career options to be inconsistent and minimal. One explanation for this outcome may be that, due to the high salience of the occupational role, persons may feel an added pressure to “get it right” when they make a career decision. The stress of this pressure may lead to self-defeating behavior, causing them to overthink and question their own judgment (Callen, Kay, & Dawtry, 2014). If this is the case, they may perceive that they do not have enough information or have inconsistent information regarding career options and, therefore, they are not ready to make a decision. On the other hand, this pressure to identify the perfect career may be so large that the decision-making process is avoided all-together and they really do lack consistent, thorough information as well as readiness to make a decision. Given that many religions encourage their pupils to pursue work that benefits society, or that persons with high religiousness/spirituality often desire to engage in work related to social justice, it may also be the case that competing values (e.g., higher income) cause complications in the cognitive aspects of career decision-making (Davidson & Caddell, 1994).

Results also imply that participants with high Occupational LRS and high DSE experience more optimistic views and beliefs about the world of work, less anxiety about the future and feel confident about their ability to succeed, and have a developed self-identity and healthy self-esteem. It may be the case that persons with high Occupational LRS have already spent a considerable amount of time contemplating their career and have a general idea of what their career goals are, thus decreasing the extent to which they experience emotional turmoil regarding the career decision-making process.

Additionally, strong support exists in the literature for Daily Spiritual Experience being

positively correlated to overall psychological well-being, in a unique way that goes above and beyond behavioral religious practices (Ellison & Fan, 2007). Moreover, DSE-specific feelings, such as experiencing God's presence and guidance, have been correlated with reduced feelings of anxiety and depression in addition to increased feelings of comfort, love, optimism, and self-esteem (Underwood & Teresi, 2002). The aforementioned idea of having pre-existing religious/spiritual schemas for work may also aid in the Emotional/PR aspects of CDMD for those high in Occupational LRS (Phipps, 2012; Fernando & Chowdhury, 2010).

Clinical Implications

The findings of the current study are of particular importance to professionals providing career services to undergraduate students who are struggling with career decision-making difficulty. Understanding that anticipated life role salience and Daily Spiritual Experiences are significantly related to the difficulties of making a career decision gives clinicians additional variables to consider when helping students who are stuck during the career decision-making process. Therefore, the utilization of life role salience and DSE assessments, in addition to thorough interview discussion on these topics, is suggested as a means of providing a more inclusive context for conceptualizing students' vocational issues as they pertain to other future aspirations.

Given the results of this study, it is suggested that providers pay particular attention to clients with the following combinations in anticipation of certain CDMD patterns:

- High anticipated Parental LRS + High DSE = Cognitive & Emotional/PR CDMD
- High anticipated Homecare LRS + High DSE = Emotional/PR CDMD
- High anticipated Occupational LRS + High DSE = Cognitive CDMD

Considering previous research on anticipated LRS and CDMD, it becomes clear that assessing for DSE is an important base to cover in vocational assessment, as it can reverse relationships previously seen between LRS and CDMD. Specifically, Schedin and colleagues (under review) found that High anticipated Marital LRS was related to a significant increase in both Cognitive and Emotional/PR CDMD. However, the current study found that this combination, with the addition of high DSE, is correlated with significant decreases in both Cognitive and Emotional/PR CDMD. Additionally, Schedin and colleagues (under review) found that High anticipated Parental LRS was related to a significant decrease in both Cognitive and Emotional/PR CDMD. However, the current study found that this combination, with the addition of high DSE, is correlated with significant increases in both Cognitive and Emotional/PR CDMD. Furthermore, Schedin and colleagues (under review) found that High anticipated Homecare LRS was related to a significant increase in Cognitive CDMD, but not Emotional/PR CDMD. However, the current study found that this combination, with the addition of high DSE, is correlated with significant increases in Emotional/PR CDMD and significant decreases in Cognitive CDMD.

The degree to which DSE influences the relationship between LRS and CDMD is certainly worth contemplating. A study by Tong (2016) that found strong links between DSE and Transcendental Positive Emotions (TPE) may be relevant in terms of

understanding the significance of DSE in the current study. Love, gratitude, and compassion constitute TPE (Shiota, Keltner, & Mossman, 2007) which, as the label suggests, allows someone to transcend issues of self-interest and rather focus on the “bigger picture”, often increasing social connection and concern with the greater good for society as a whole (Algoe & Haidt, 2009; Haidt & Keltner, 2004). Tong (2016) found that persons with high DSE often experience a wider range of TPE on a daily basis than those with low DSE. Additionally, “...DSE also moderated day-to-day switch from general negative emotions to transcendental positive emotions, indicating that higher spirituality participants were more able to bounce out of their negative emotions on Day 1 to feeling transcendental positive emotions on Day 2” (p. 9). Interestingly, DSE was positively correlated with variability and instability of TPE experiences. Tong provides a possible explanation for this finding by suggesting that persons with high DSE may experience short-term increases in TPE variability/instability due to the process of bouncing between common daily negative emotions and subsequent TPE’s, resulting in long-term benefits of overall increased TPE frequency. Further, “...the findings that high DSE individuals rebounded from feeling global negative emotion one day to feeling transcendental positive emotion (but not general positive emotion) the next day is important in light of findings that people can experience spiritual growth in traumatic situations” (p. 9). The correlation strength between DSE and such a global psychological construct as TPE provides some context for interpreting the results of the current study, in which DSE reverses the direction of relationships between LRS and CDMD found in one previous study.

As mentioned previously, DSE is a construct measured under the umbrella of religiousness and spirituality in this study; however, previous studies assert that DSE influences psychological well-being above and beyond measurements of religious/spiritual practices (Ellison & Fan, 2007). Given that DSE was the only subscale of the BMMRS to show significant moderating effects in the relationship between anticipated LRS and CDMD, it appears that DSE has some unique function in this context that was not accounted for by any other religiousness/spirituality subscales. Therefore, in the context of preliminary career counseling assessment, it may make sense to utilize a DSE-specific instrument (e.g., DSES; Underwood & Teresi, 2002) as opposed to a general religiousness/spirituality measurement such as the BMMRS.

When providing vocational guidance, as with any psychotherapy, it is extremely helpful to identify specific problem areas early in the process of treatment to create well-informed, individualized treatment plans that would allow the clinician to provide the most efficient and ethical services (Sampson et al., 2004; Slaney, 1988). In the current study, the assessment of participants' DSE produced extremely specific information about the type of CDMD experienced by certain groups. This is particularly true for participants with high DSE that also had High anticipated Homecare or Occupational LRS. For these two groups, one aspect of CDMD was increased, while the other was decreased. Theoretically, this assessment output could inform clinicians about specific areas of deficit as well as areas of strength in the career decision-making process.

As mentioned in the literature review, studies have shown that clients struggling with the Emotional/Personality-Related aspects of CDMD often require significant

increases in length of treatment and are likely to require interventions outside the scope of vocational counseling (Gati et al., 2010; Saka & Gati, 2007). This makes sense considering the focus on long-standing traits such as anxiety, pessimistic views, and self-concept in the assessment of Emotional/PR CDMD, and the non-vocational psychotherapy interventions often used for such presenting issues. Thus, it would be extremely helpful for clinicians to anticipate this type of treatment trajectory early in the process of working with clients who are struggling specifically in the realm of Emotional/PR CDMD (i.e., persons with high Homecare LRS and high DSE), rather than focusing too early on vocational intervention exclusively. These findings highlight the regular calls for integration of personal and career counseling and the need for clinicians to have adequate cross training (Bedi, 2004; Fouad, 2001; Hesketh, 2001; Lent, 2001).

On the other hand, and also mentioned in the literature review, Cognitive origins of CDMD are considered to be less severe than Emotional/PR CDMD (Gati et al., 2010). This is equally helpful for clinicians to know when treating someone with High anticipated Occupational LRS and High DSE, as the results of this study suggest that the difficulties they experience in the career decision-making process are specific to Cognitive issues such as lack of readiness, inconsistent information, and lack of information (i.e., areas that can be effectively targeted by vocation-specific interventions and/or accurate information sharing). Moreover, it is certainly helpful for clinicians to know that clients with high anticipated Parental LRS and high DSE are likely to need both vocation-specific and additional psychotherapy, as the results of this study suggest this group experiences CDMD in both Cognitive and Emotional/PR areas. There is strong

support in the current literature, though a controversial topic among some vocational psychologists, for the benefits of integrating both personal and career counseling to create a more holistic approach to vocational interventions (Bedi, 2004; Fouad, 2001; Hesketh, 2001; Lent, 2001).

The results of the current study build upon the current body of vocational counseling literature to provide a more comprehensive understanding of the factors that influence career decision-making difficulty. Based on these results, it is suggested that providers add formal assessment of anticipated life role salience (e.g., LRSS; Amatea et al., 1986) and daily spiritual experience (e.g., DSES; Underwood & Teresi, 2002; BMMS; Fetzer Institute, 1999) to their existing vocational assessment battery prior to beginning career counseling treatment. If measures of both Cognitive and Emotional/PR CDMD are not included in a clinic's existing vocational assessment battery, the addition of these is suggested as well (e.g., EPCD; Saka et al., 2008; CDDQ; Gati et al., 1996). In acknowledgement of financial considerations for clinics providing vocational services, each of these suggested assessments can be utilized free of charge. The benefits of gathering this specific information prior to beginning vocational counseling would allow for more immediate, accurate, and specific identification of clients' difficulties in the career decision-making process. This may significantly decrease wasted time and energy for both client and clinician in the course of therapy by creating a well-informed treatment plan that can immediately address the biggest problem areas.

Although the process of administering and discussing the results of additional assessments may increase the duration of the intake process to some extent, the long-term

benefits for the therapy trajectory are likely to make up for, and may even exceed, this difference. Vocational psychology practitioners should also consider the ethical implications of neglecting steps that could increase the efficiency and effectiveness of treatment interventions. Given the current literature on the negative psychological effects of unemployment, career indecision, and career decision-making difficulty, the implications for providing high-quality vocational services have the ability to significantly decrease clients' suffering in terms of depression, anxiety, substance abuse, and even suicide prevention (Dooley, 2003; Paul et al., 2009). By adding formal assessment and thorough clinical interviewing on issues of life role salience and daily spiritual experience, clinicians can approach vocational interventions with a holistic conceptualization that acknowledges the client's career path in the context of their overarching life goals. Remember that career decision-making difficulty has been shown to contribute to poor career decision-making (Gati et al., 1996). Thus, helping clients to identify careers consistent with their values and lifestyle is likely to result in increased job satisfaction, performance, and retention (Dooley, 2003; Saka et al., 2008). These are also important steps for the field of vocational psychology in terms of moving toward a more culturally sensitive paradigm, though there remains much room for improvement.

Limitations and Directions for Future Research

The current study was limited by demographic restrictions. All participants were enrolled in the same mid-sized, southeastern university and were of traditional college age (i.e. 18-25 years of age). Additionally, the racial distribution for the sample for this study was 68% White and 32% Black participants. All participants were enrolled in a

psychology course at the time they completed the survey. Due to considerations for the length of survey used to collect data for the current study, it was decided that demographic variables of race and sex would be measured as proxies for racial identity and femininity/masculinity constructs. This was not ideal in terms of the theoretical basis for hypotheses of the current study; thus, it is suggested that formal measurements of racial identity and femininity/masculinity be used in future studies of multicultural moderators for the relationship between LRS and CDMD (e.g., Conformity to Masculine Norms Inventory; Mahalik, et al., 2003; Conformity to Feminine Norms Inventory; Mahalik, et al., 2005).

Considering that many aspects of the results did not support the initial hypotheses regarding relationships between the constructs of this study (though possible explanations are suggested for the outcome data), further exploration of these relationships is encouraged for future studies. It would be interesting to test whether or not the results of the relationships in the current study would be replicated within a more culturally diverse sample (i.e. within a sample of greater racial diversity, ethnic diversity, socio-economic diversity, expanded geographical representation, expanded age range, and diversification of education level), and even more interesting to assess the implications of these results. In this way, it is important to interpret the findings of this study in light of cultural norms for this geographical region (i.e., southeastern USA), such as conservative religious and political values, as well as more traditional gender roles (Abara, Coleman, Fairchild, Gattist, & White, 2015). Given the significant moderating effect of Daily Spiritual Experience, it would be interesting to consider a more in-depth exploration of this

construct as it relates to life role salience and career decision-making by utilizing a more culturally diverse sample and a DSE-specific instrument (e.g., DSES; Underwood & Teresi, 2002). A comparison of anticipated life role salience and actual life role salience should be explored in future research to identify any significant differences in anticipated life role salience for people who are currently engaged in certain life roles and people who are not currently engaged in certain life roles.

By utilizing the theoretical framework of career development and life-space theory, the previously established relationship between anticipated life role salience and career decision-making difficulty (Schedin et al., Unpublished manuscript) was examined in terms of multicultural moderators (i.e., race, sex, individualism/collectivism, and religiousness/spirituality). Significant findings of this study include support for Daily Spiritual Experience, which is one aspect of religiousness/spirituality, as a significant moderator of the relationship between anticipated LRS and CDMD. Details of this moderation suggest that:

- As participants' Marital role salience and DSE increase, CDMD decreases.
- As participants' Parental role salience and DSE increase, CDMD increases.
- As participants' Homecare role salience and DSE increase, their Cognitive CDMD decreases but Emotional CDMD increases.
- As participants' Occupational role salience and DSE increase, their Cognitive CDMD increases, but Emotional CDMD decreases.

These findings support the need for vocational professionals to address the salience or importance of different life roles, in addition to multicultural factors such as

daily spiritual experience, particularly when assisting clients that feel stuck in their vocational development or cannot make a career decision.

APPENDIX A – Institutional Review Board Application

Life Role Salience and Career Decision-Making 1

HUMAN SUBJECTS REVIEW The University of Southern Mississippi

I. Project Goals

The main goal of this study is to assess the extent to which cultural variables (i.e., race, gender, religiousness/spirituality) moderate the relationship between anticipated life role salience (i.e., occupational, parental, marital, and homecare) and career decision-making difficulty in the college student population.

II. Protocol

Participants

Approximately 300 undergraduate students (age 18 to 25) will be recruited through the on-line research system (<http://usm.sona-systems.com/>) used by the Department of Psychology.

Procedure

Through the Sona research system, potential participants will follow a link to an online survey host (<https://usmep.us2.qualtrics.com>) where they will be presented with our consent form (see pages 3-4). Potential participants will be informed that their participation is voluntary and that they can discontinue the study at any time without penalty. Quality assurance checks will be integrated into this research to assess the provision of thoughtfully provided and meaningful responses. These checks may include review of completion time of surveys and answers to strategically placed validity items (see specific items on the bottom of the Demographics questionnaire attached to this application). Participants that do not adequately pass the quality assurance checks will not receive research credit. The online survey will contain the following measures:

- Demographic questionnaire
- Two validity items
- Career Decision Difficulty Questionnaire (CDDQ, Gati, Krausz, & Osipow, 1996)
- Emotional and Personality-Related Career Decision-Making Difficulties Questionnaire (EPCD, Saka, Gati & Kelly, 2008)
- Life Role Salience Scales (LRSS; Amatea, Cross, Clark, & Bobby, 1986)
- The Fetzer Brief Multidimensional Measure of Religiousness/Spirituality (BMMRS; Fetzer Institute, 1999)
- The Horizontal and Vertical Individualism and Collectivism Scale (HVIC; Triandis & Gelfand, 1998)

III. Benefits

Participants are not expected to derive direct benefits from participation in this study. However, results are expected to contribute to the literature on career decision-making difficulty which may build vocational theory and aid clinicians in providing more accurate services.

IV. Potential Risks and Safeguards

There are minimal foreseeable risks for the participants of this study. However, there is always the possibility that someone may experience mild emotional distress as a result of the questionnaire content. Participants will be warned of this potential risk before consenting and will be given the lead researcher's contact information, as well as contact information for local mental health treatment centers should they experience any distress. Participants will be encouraged to contact the lead researcher with concerns and seek mental health treatment if they are adversely affected by the content of the questionnaires in any way.

The following steps will be taken to protect participants from potential risks and insure that the data provided remain secure:

1. The consent form provides the lead researcher's contact information and contact information for local mental health treatment centers, in the event that a participant experiences distress while participating. Participants will be warned of the potential risk of mild emotional distress and encouraged to contact someone should this occur.
2. Participants will be informed in writing, via the consent form, that their participation is voluntary and that they may withdraw their participation at any time without penalty or loss of benefits.
3. Participants' names will be collected in order to assign credit. However, participants' names will be deleted immediately after credit is assigned and will not be associated with specific questionnaire responses.
4. All questionnaires are self-report and noninvasive.
5. All data will be stored securely in a locked area.

V. Informed Consent

Informed consent will be obtained online before administration of the questionnaires. The consent form will be presented, and subjects will be required to check a box indicating that they consent and supply an electronic signature. Informed consent will present the nature of the study and management of data in a manner that will educate the participants in lay terms. Participants will be informed of the extent of the confidentiality of their identity. Contact information for individuals knowledgeable about the research will also be provided. There will be a statement regarding voluntary participation and the right to withdraw at any time without adverse consequences.

Potential participants will be informed in the consent form and again at the beginning of the survey that (1) quality assurance checks are used in this study to make sure that participants read each question carefully and provide meaningful responses; and that (2) participants who do not pass these checks will not receive research credit.

As recommended in the literature on online research (e.g., Huang, Curran, Keeney, Poposki, & DeShon, 2011; Meade & Craig, 2012) two types of quality assurance checks will be used. First, page completion time will be assessed on the longer questionnaires. Participants who complete these questionnaires so quickly that they could not have possibly read the items before responding to them (e.g., answering a 30-item questionnaire in less than 1 minute) will be automatically routed out of the study so they will not receive incentives for completing it. Second, 2-3 bogus items (e.g., "Please rate this statement with a six (6)") will be blended into 2-3 of the longer questionnaires. Participants who answer more than one of these items incorrectly will be automatically routed out of the study so they will not receive incentives for completing it.

INFORMED CONSENT
The University of Southern Mississippi
Authorization to Participate in Research Project

Consent is hereby given to participate in the study titled:
*Cultural Influences on Life Role Salience and Career
Decision-Making Difficulties*

Purpose: The purpose of this study is to assess the potential influence anticipated life roles (i.e., occupational, parental, marital, and homecare) can have on career decision-making difficulty for college students.

Description of Study: Participants in this study will be asked to complete several questionnaires that assess difficulties in relation to career development as well as importance of other life roles. All questionnaires completed will be done so anonymously and all responses will be kept confidential. All resulting data will be combined, all identifying information will be removed, and the data will be entered into a computer database program and appropriately analyzed. This process does not incorporate any invasive procedures and participants can expect questionnaires to take approximately 1 hour to complete. The study researchers will be taking the time to assess and review the validity of the answers you provide to this survey. Be sure to pay close attention to the survey and provide meaningful responses to each item. Indication that participation in this survey was not given your full attention may result in no class credit given.

Benefits: Potential benefits of this research include a better understanding of the variables affecting college students' career development and the potential of partial fulfillment of class credit if applicable to you.

Risks: This is a minimal risk study that does not ask significantly personal questions and as a result there do not appear to be any major risks related to completing the questionnaire. Participants may experience distress when completing some questionnaires as subject matter may be personal or provoke discomfort. Should participants experience distress and wish to seek counseling services, they can contact the USM Student Counseling Services: Kennard-Washington Hall, Room 200; Phone: 601-266-4829. Participants can discontinue from further participation in the study at any time without consequence. Further, participants can contact the principle investigator of this study, Emily Schedin, at any time throughout the study. If you are interested in seeking career assistance, USM makes career assistance available to USM students through USM Career Services: McLemore Hall, Room 125; Phone: 601-266-4153; Email: cgp@usm.edu.

Confidentiality: This is an online survey and only researchers will have access to the information provided. Information related to the questionnaires will be stored in a locked room located in the Department of Psychology at The University of Southern Mississippi. Information from these questionnaires will be entered into a computer database, will be combined, and will no longer be connected to a participant's name after completion of the forms.

Alternative procedures: Any participant may discontinue participation in this study at any time without consequence. If you are seeking class credit through your participation in this study, please refer to your course instructor for alternatives to participating in this research project.

Participant's assurance: Assurances cannot be made concerning results that may be obtained (since results from investigational studies cannot be predicted). Yet, the researcher will take every precaution consistent with the best scientific practice. Participation in this project is completely voluntary, and participants may withdraw from this study at any time without penalty, prejudice, or loss of benefits. Questions concerning the research should be directed to Emily Schedin, M.A. at Emily.schedin@eagles.usm.edu. This project has been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research subject should be directed to the chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, (601) 266-6820.

- ☐ I consent to participate in this research
- ☐ I do not consent to participate in this research

APPENDIX B – Institutional Review Board Notice of Committee Action



INSTITUTIONAL REVIEW BOARD
118 College Drive #5147 | Hattiesburg, MS 39406-0001
Phone: 601.266.5997 | Fax: 601.266.4377 | www.usm.edu/research/institutional.review.board

NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months.
Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 14072201
PROJECT TITLE: Cultural Influences on Life Role Salience and Career Decision-Making Difficulties
PROJECT TYPE: New Project
RESEARCHER(S): Emily Schedin
COLLEGE/DIVISION: College of Education and Psychology
DEPARTMENT: Psychology
FUNDING AGENCY/SPONSOR: N/A
IRB COMMITTEE ACTION: Expedited Review Approval
PERIOD OF APPROVAL: 08/07/2014 to 08/06/2015

Lawrence A. Hosman, Ph.D.
Institutional Review Board

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